

Which Relationships Matter? Communicating College Persistence in the Rural Non-rural Student Divide

by

Cassidy Stefka

B.A., Doane University, 2015

A THESIS

submitted in partial fulfillment of the requirements for the degree

MASTER OF ARTS

Department of Communication Studies  
College of Arts and Sciences

KANSAS STATE UNIVERSITY  
Manhattan, Kansas

2018

Approved by:

Major Professor  
Natalie Pennington

# **Copyright**

© Cassidy Stefka 2018.

## **Abstract**

College student persistence has long interested scholars and universities alike (Bean, 1983; Goodman, & Pascarella, 2006; Hlinka, 2017; Moschetti & Hudley, 2014; Pascarella & Terenzini, 2005; Tinto, 1993; 2012). While universities have given attention to the academic integration of students (e.g., their GPA and general academic performance), social integration has become increasingly more studied as an integral component to a student's likelihood to persist (Tinto, 1993; 2012). This study incorporated social capital theory (Coleman, 1988) as a lens to understand how social integration may affect a student's likelihood to persist. Using survey methodology and a sample of first-year students at large midwestern university ( $n = 101$ ), the results showed that strong school social capital in the form of relationships with peers and authority figures at college may help a student overcome structural disadvantages embedded within their family and home community social networks. Specific differences in the formation of social capital between nonrural and rural students were also explored with meaningful results. Rural students were more likely to perceive stronger relationships with authority figures at college than nonrural students, and nonrural students were more likely to perceive their home communities as more supportive of higher education than rural students.

## Table of Contents

List of Tables .....	vi
Acknowledgements .....	vii
Chapter 1 - Introduction.....	1
Chapter 2 - Literature Review.....	8
Persistence in College .....	8
Social Capital .....	12
School social capital .....	14
Family social capital .....	22
Community social capital .....	28
Chapter 3 - Methods.....	35
Participants.....	35
Procedures.....	37
Measures .....	37
Intent to persist.....	37
School social capital .....	38
Family social capital .....	39
Community social capital .....	40
Qualitative data .....	41
Chapter 4 - Results.....	42
RQ1: Persistence and Social Capital .....	42
RQ2: Persistence and Rural/Nonrural Students.....	43
RQ3a: School Social Capital and Rural/Nonrural Students .....	44
RQ3b: Family Social Capital and Rural/Nonrural Students .....	44
RQ3c: Community Social Capital and Rural/Nonrural Students .....	45
Chapter 5 - Discussion .....	47
The Value of School Social Capital for Persistence .....	47
Persisting Beyond the Rural/Nonrural Divide .....	51
The Value of Peers and Authority Figures .....	52
Family Support: Income, Siblings and Communication.....	53

Questioning Community .....	55
Chapter 6 - Conclusion .....	58
Limitations .....	62
Future Directions .....	65
References .....	70
Appendix A - IRB Consent Form .....	81
Appendix B - Survey Measures .....	82
Appendix C - Table 1 .....	88
Appendix D - Table 2 .....	89
Appendix E - Table 3 .....	90
Appendix F - Table 4 .....	91
Appendix G - Table 5 .....	92

## **List of Tables**

Table 1. Scale Reliability Statistics and Descriptive Statistics for Variables.....	88
Table 2. T-Test and Descriptives for School Social Capital by Student High School County.....	89
Table 3. T-Test and Descriptives for Family Social Capital by Student High School County ....	91
Table 4. T-Test and Descriptive for Community Social Capital by Student High School County .....	92

## **Acknowledgements**

The topic of this thesis was undoubtedly personal. While working through the influence of social capital on student educational outcomes, I found myself reflecting on the relationships in my life that offered me support, information, guidance and ultimately that led to the completion of this thesis. I credit the following people for influencing my behavior for the better.

In my first year of graduate school, I unknowingly chose the perfect advisor for my journey. Dr. Natalie Pennington has offered advice, criticism, information about graduate school processes, humor, and unwavering support and confidence all of which led to my persistence in graduate school. Her mentorship has made me a better writer, a better scholar, and above all, a better human.

Second, my partner has provided support throughout this entire process. I thank you from the bottom of my heart for encouraging me to pursue a graduate degree, even when it meant spending the last two years apart. To my family, thank you for communicating to me the importance of education and supporting my fascination with books at an early age. For my siblings, I only hope that I have passed along as much beneficial social capital to you that you have provided me.

My committee members and instructors at all levels of my education, thank-you for the countless hours of editing my work and interest in my future. Your care in my development as a scholar was influential in my ability to persist to each graduation. Thank you for your encouragement and kind words along the way.

## **Chapter 1 - Introduction**

College student persistence has long interested institutions of higher learning and scholars (Bean, 1983; Chen & St. John, 2011; Goodman, & Pascarella, 2006; Hlinka, 2017; Lohfink, & Paulsen, 2005; Moschetti & Hudley, 2014; Pascarella & Terenzini, 2005; Reason, 2009; Tinto; 1993; 2012). Persistence refers to a student completing college and receiving a degree either at the same institution in which they started or a different one (Tinto, 1993; 2012). Importantly, persistence as a concept is viewed from the student perspective rather than a university's (i.e., universities are generally concerned with retention, or keeping a student enrolled at the same institution with which they started) (Tinto, 1993; 2012). As Tinto (2012) noted, there is little benefit for a student to start college and not persist to degree completion.

While persistence is an issue that affects various subsets of the student population, the college enrollment and persistence of students from rural communities continues to be of interest to scholars (Adedokin & Balschweid, 2008; Byun, Irvin, & Meece, 2012; 2015; Byun, Meece, & Agger, 2017; Hlinka, 2017; Howley, 2006; King, 2012; Nelson, 2016; Tucker, 2010). The United States Department of Agriculture Economic Research Service (2017) reports rural students have the lowest college enrollment rate of any locale. In 2015, only 29.3% of rural youth ages 18-24 were enrolled in an undergraduate program; students from cities (47.7%), suburban areas (42.3%) and towns (41.2%) all had greater representation in colleges and universities than rural areas ("Rural Education in America," 2015). Though the unequal distribution of bachelor's degrees and disproportionate college enrollment rates between urban and rural areas would seem to indicate a lack of readiness for college by rural students, data from the National Center for Education would suggest otherwise. High school academics in rural schools show performance rates on par or above suburban and urban schools. The National



Center for Education Statistics (2013) reports that students in rural areas have higher freshmen graduation rates (80%) than students in cities (68%) and towns (79%); suburban students have the highest freshmen graduation rates at 81% (p. 7). The competitive national freshman graduation average for rural students could be an indication of the benefit of small class sizes, as rural school districts make up 57% of America's school districts, 32% of all schools, but only 24% of the U.S. student population in public schools (NCES, 2013, p. 1). However, rural students simply do not make it to college at the same rates as nonrural students despite being just as well prepared academically.

One reason for this discrepancy in enrollment rates between rural and nonrural students may be that rural students are often first-generation college students (Byun, Irvin et al., 2012; Estes, Estes, Johnson, Edgar, & Shoulders, 2016; Howley, 2006). Since rural students may lack access to adults who are college educated in both their families and communities, they may not have access to information in their social networks that could help them navigate unknown college processes (Nelson, 2016). Research has shown that there is little guidance found in many social networks of first-generation students seeking to navigate the college journey (Gist-Mackey, Wiley, & Erba, 2018; Nelson, 2016). As a result, first-generation students must seek to form these beneficial relationships once they arrive on their college campus (Gist-Mackey et al., 2018). Rural students may also experience a sort of culture shock when arriving on a college campus from their small communities (Ganss, 2016). Moving from a community with low levels of education into a possibly much larger community dedicated solely to education may be a jarring experience for many rural students.

However, if a first-generation college student can persist past their first year of college, the chances of continuing to graduation increase significantly (Somers, Woodhouse, & Cofer,

2004; Tinto, 1993). Persistence scholarship more generally has emphasized the importance of social integration within the first year of college to positively affect a student's likelihood of persistence to a college degree (Ganss, 2016; Pascarella & Terenzini, 2005; Tinto; 1975; 1993; 2012). For instance, sophomores, juniors and seniors are more likely to continue to graduation than first-year, first generation students (Somers et al., 2004). Older students are more likely to have social connections on campus than first-year students. In terms of persistence, attention must be given to the first year of the college experience, specifically the relationships formed in that crucial first year of college, that contribute to a student's success.

While persistence can be evaluated in many different ways (Tinto, 2017), this thesis is concerned with the role of social capital on a student's intentions to persist in college. Social capital, or the potential of social networks to communicate valuable information that may influence an individual's behavior (Coleman, 1988), becomes one way to understand how knowledge gaps about college are filled for a rural college student. Students enter college with relationships already in place from their families and home communities. The value or drawbacks of these set relationships are termed family and community social capital. Relationships in rural communities specifically tend to be what Coleman (1988) would term close-tie, or, relationships that are often heavily maintained and have a considerable influence over both peer and community norms, highlighting the potential unique value of studying social capital within the frame of rural-nonrural students. While these tight-knit relationships can be incredibly beneficial to rural community members in terms of facilitating community trust and safety (Coleman, 1988) the value does not always extend to those that choose to leave the community (Adedokin & Balschweid, 2008; Coleman, 1988). This speaks to the complexity of social capital, in showing that it can help but also hinder certain choices; for rural students going

to college may mean accepting the low likelihood of finding a job in the same rural community one grew up in (Estes et al., 2016). As a result, young adults from rural areas who choose to attend college at a four-year university are not just leaving behind their parents, family, and childhood friends, they may also be leaving the community that has supported them their entire lives. The interplay of community capital and family capital as it relates to capital formed at school becomes the primary focus for this study in addressing the role of social capital and persistence. In essence, this study is interested in the differences of each type of social capital for rural and nonrural students.

However, once a student enters college, they will begin forming new relationships, or integrating into college social life. The first type of capital that will be explored is school social capital which is manifested in relationships formed through social networks, i.e., peers, instructors, academic advisors, and/or university staff (Nelson, 2016). These relationships may begin as weak ties, or relationships that are not heavily maintained (Coleman, 1988), but can communicate important information to a student unfamiliar with the college processes. Students may come to rely on the new relationships formed at college in which case these relationships can surpass weak ties and become strong ties. This type of social capital is where Tinto's (2012) social integration is displayed.

The second form of capital explored in this study is family social capital, relationships with which students likely enter college. Family social capital is generally manifested in close-tie relationships, or relationships that are often heavily maintained (e.g., parents, siblings). This is exemplified in both family demographics and in family processes, meaning that if both parents have a college degree, they are likely to communicate with their children about how to succeed in that phase of their lives (Nelson, 2016). Additionally, information passed among siblings can

constitute a form of family social capital (Gillies & Lucey, 2006). However, for first-generation students, the benefits of knowledge of and support for higher education from family relationships may be lacking (Nelson, 2016). Coleman (1988) explained that the closer the social ties are in a relationship, like those displayed in family social capital, the more likely those relationships are to influence the behavior of individuals. Hence, coming from a family that has low expectations for success in higher education may negatively affect the behavior of individuals, and vice versa.

The final type of social capital that is explored in this study is community social capital. This can encompass both weak-tie and close-tie relationships depending on the structure of one's community (Coleman, 1988). Social networks within a community can become stronger if they overlap through multiple community organizations (Coleman, 1988); for instance, community members may know one another from being involved in a church and from school fundraisers. The more overlap that exists within a community, the higher the levels of trust and the possibility for information to be shared in multiple ways (Coleman, 1988). Interestingly, rural students who have completed their bachelors' degrees rarely return home to rural areas (Estes et al., 2016). This phenomenon, known as the rural brain drain, creates rural communities that continuously lose many of the academically bright students they create (Estes et al., 2016). This suggests that students in rural communities who are planning to apply for college may have less access to adults that have navigated the application process than their urban counterparts (Nelson, 2016). Community social capital may have both positive and negative effects on students attending college depending entirely on how close the social ties are and the amount of trust that exists within their home community.

Given the benefits associated with a college degree in terms of personal development, economics, and civic engagement (Baum, Ma, & Payea, 2013; Pascarella & Terenzini, 2005),

and the understanding that close relationships can influence an individual's behavior by communicating information and creating social norms (Coleman, 1988), an exploration into the relationships that help or hinder students from persisting to their college degree remains an important task for research. Tinto (2012) explains that the first step in improving student persistence in academic institutions relies on the investment of "institutional assessments to pinpoint those aspects of institutional functioning that require improvement" (p. 94).

Assessments rely on creating generalizable data that reflect student's experiences within the university (Tinto, 2012). Data can be collected at a national level, but it must also be localized to each individual institution (Tinto, 2012). This study seeks to serve as one example of localized data that can be generalized for an institution. Importantly, it also seeks to offer important connections across literature to show the value of studying social capital within communication studies.

While social capital theory did not originate in the field of communication studies, in recent years, communication studies scholars have benefited from the transdisciplinary work on social capital that comes out of disciplines such as sociology, political science and economics (Kern, 1997; Kikuchi & Coleman, 2012; Lee & Sohn, 2016). For example, Putnam's (2001) contributions to social capital theory, born out of sociology, have been widely explored within the field of communication studies (Aubrey & Rill, 2013; Ellison, Steinfield, & Lampe, 2007; Kikuchi & Coleman, 2012; Lee & Sohn, 2016), but Putnam's popularity has also signaled a significant move away from original social capital theorists, Bourdieu (1986) and Coleman (1988). Putnam's (2001) arguments centered on declining social capital in America, and viewed social capital en masse, rather than at an individual social network level. This thesis will re-center Bourdieu (1986) and Coleman's (1988) method for analyzing social capital at the

individual level, using social networks. While communication scholars have produced research on social capital, this thesis argues that contributions to social capital scholarship framed from original social capital scholars are still lacking in communication studies given the breadth (e.g., social capital across multiple communities) rather than depth (e.g., social capital from an individual social network approach) of communication studies research on social capital (Kikuchi & Coleman, 2012). By coupling social capital with persistence theories, this thesis frames relationships, particularly the communication and social norms that occur within relationships, as an area essential for communication scholarship. And framing social capital by investigating rural-nonrural student persistence offers a greater depth of understanding of the role(s) social capital can play for college students today.

With this in mind, this study broadly aims to provide insight into which relationships help a student make it to college graduation. By focusing on a student's first year of college, a picture of social integration can begin to take form. Specifically, how information and support are communicated in a way that is likely to keep a student persisting to graduation – or hinder them from success in higher education is of interest to this study. Using quantitative methodology by way of a self-reported survey analysis, a more generalized conclusion about student persistence can be reached. In chapter two, literature about persistence and each type of social capital (i.e., school, family and community) will be explored with scholarship about rural student experiences threaded throughout each section. Chapter three will discuss the research methodology used in an effort to answer the research questions posed. Next, chapter four will explain the results from the survey, while chapter five will discuss those results as it relates to the existing literature. Finally, chapter six will conclude with limitations and future directions for research on college student persistence.

## **Chapter 2 - Literature Review**

### **Persistence in College**

The benefits of a bachelor's degree are well documented (Baum et al., 2013; Pascarella & Terenzini, 2005). Students who finish college “become more mature, knowledgeable, and focused ... in thinking about a career” (Pascarella & Terenzini, 2005, p. 534) and also have healthier lifestyles, are more civically involved, and experience less unemployment than individuals without a bachelor's degree (Baum et al., 2013). In terms of economics, a bachelor's degree offers a “net occupational status advantage over a high school diploma” by about 33 percentile points; which translates to higher lifetime earnings for a bachelor's degree holder (Pascarella & Terenzini, 2005, p. 535). Specifically, median income earnings for individuals with a bachelor's degree were about \$20,000 higher per year than those with a high school diploma in 2013 (Baum et al., 2013). Given these benefits depend on bachelor's degree completion, student persistence to graduation becomes a necessary area to understand. Scholarship concerning college student persistence is generally measured from the student perspective and involves a student completing college and receiving a degree (Byun, Irvin et al., 2012; Somers et al., 2004; Tinto, 1993). This student-centered view of persistence calls for a theoretical lens that accounts for both student development and institutional actions that may affect student persistence.

To resituate the responsibility of college student persistence from students' individual traits to include both the individual student *and* institutional actions, Tinto (1975) developed a theory of student retention which emphasized student academic and social integration into college systems that could be helped or hindered by institutional actions. Scholarship has since

followed Tinto's (1975; 1993) arguments and explored the interplay of these two categories of integration that proved crucial to college student persistence (Chen & St. John, 2011; Elkins, Braxton, & James, 2000; Hausmann, Schofield, & Woods, 2007; Jehangir, 2010; Pascarella & Terenzini, 2005; Pompper, 2006; Wells, 2008). Both academic and social integration consist of formal and informal characteristics involving student, staff, and faculty members.

Academic integration "concerns itself almost entirely with the formal education of students" (Tinto, 1993, p. 106). This involves the classrooms, staff and faculty whose responsibility it was to instruct and help students navigate college systems. Tinto's (2012) approach accounts for both informal and formal faculty interactions with students. For instance, many universities have minimum grade point averages students must maintain to continue their enrollment, and ultimately persist to a college degree. Failure to maintain the minimum GPA may lead to increased academic support and in the worst cases, academic probation or dismissal (Tinto, 1993). However, Tinto (2012) asserts, students must also be aware of "the roadmap to success – the rules, regulations, and requirements for degree completion..." (p. 22). This roadmap is not shaped by the prior knowledge with which students entered college but rather by the advice and support communicated by faculty members and staff at the institution (Tinto, 2012). Hence, grade point average does not sufficiently account for the causes behind student attrition. Universities and scholars must also concern themselves with relationships formed by students with faculty and staff and the information communicated to students by their institutional mentors. These relationships are not only found in academic integration but also in social integration.

Social systems within college also provide information and reassurance students may need to persist to graduation and involve "the daily life and personal needs of the various



members of the institution, especially the students” (Tinto, 1993, p. 106). Social systems include peer interactions and non-institutional activities. Unlike with academic integration, integration or membership in the social system is not typically addressed by universities as a formal requirement to persist (Tinto, 1993). For instance, universities do not require students to have friends or interact with people on campus to graduate from college like universities do with student academic requirements. However, attrition often results from failure to integrate socially, and this cause often goes unnoticed by the academic institution (Tinto, 1975; 1997; 2012). Thus, while a consistent low grade-point average can end a college career from an institutional-initiated separation, lack of informal social integration, or making friends on campus, may also end a college career from a self-initiated separation. Therefore, it is a combination of these two systems (e.g., academic and social integration) that contribute to student persistence; “the more students are academically *and* socially engaged with faculty, staff, and peers, the more likely they are to succeed in college” (Tinto, 2012, p. 7, emphasis added).

However, timing in the formation of these social relationships also plays a significant role in their value to student persistence. Of particular import for academic and social integration is the first year of college (Duggan, 2004; Tinto, 1993; 2012). Indeed, there is no shortage of scholarship concerning the importance of first-year student persistence (DeBard & Sacks, 2010; Duggan, 2004; Elkins et al., 2000; Gross, Hossler, & Ziskin, 2007; Lohfink & Paulsen, 2005; Wells, 2008). Tinto (1998) furthered:

Attrition is, for most institutions, most frequent during the first year of college. Nearly half of all leavers depart before the start of the second year. It therefore follows that the impact of involvement upon persistence is greatest in that year, especially during the first

ten weeks when the transition to college is not yet complete and personal affiliations are not yet cemented (Tinto, 1998, p. 169).

Universities must pay close attention to student integration when relationships are not yet formed within social systems. Tinto (2017) suggested persistence in college can be improved with special attention to a student's self-efficacy or an individual's belief in their ability to complete a task successfully (Tinto, 2017). In a general sense, students need to believe they can finish a college degree to react to challenges in a motivated way (Tinto, 2017). Self-efficacy may be particularly important for students who come from home communities with low levels of college education.

For rural students specifically, scholarship has shown they are less likely to attend college than are students from urban and suburban areas (Hu, 2003; USDA, 2017). Specifically, in 2015, only 29.3% of rural youth ages 18-24 were enrolled in an undergraduate program; students from cities (47.7%), suburban areas (42.3%) and towns (41.2%) all had greater representation in colleges and universities than rural areas (USDA, 2017). However, scholarship has shown rural students that do make it to college are nearly as likely to persist to graduation, but at slower rates than suburban/urban students (Byun, Irvin et al., 2012). This slower rate of degree completion may be attributed to several individual characteristics of rural students, but in line with Tinto's (1993) proposal, research must account for institutional and social causes to be explored in the context of rural student persistence, which are discussed in later sections. Individual characteristics that must be considered when understanding rural college student persistence include precollege characteristics and race/ethnicity. Precollege characteristics include generally high school preparation, courses and GPA (Fischer, 2007). In a general sense, "better preparation for college results in better college grades" (Fischer, 2007, p. 144). However, rural high schools

tend to prepare their students on par or above the national average (NCES, 2013), so it might be assumed that rural students are well prepared to academically integrate into college.

Given the importance of Tinto's (1975; 1993) social integration, this study will explore how relationships can help or hinder a student's social integration into college. For rural students specifically, though they may be prepared for academic integration, slower social integration may help explain why rural students take longer than nonrural students to persist to graduation. In general, social capital theory (Coleman, 1988) is one way to conceptualize the value inherent to an individual's social network. By combining Tinto's (1975; 1993) theory of social integration with Coleman's (1988) social capital theory, a better understanding of the relationships that help or hinder student persistence might be formed.

## **Social Capital**

As a theoretical framework, social capital theory generally takes one of two approaches within communication studies; social cohesion or social network (Lee & Sohn, 2016). In short, social cohesion focuses on social trust within groups or communities of people and tends to look at larger trends (Lee & Sohn, 2016; Putnam, 2001), while social network approaches distinguish the individual from the group, advancing a more egocentric approach to analysis (Coleman, 1988; Lee & Sohn, 2016). This study is primarily concerned with individual perceptions of personal social networks that may have helped students gain beneficial information about college, so an egocentric approach is given priority. However, in an effort to account for students' home communities and their social norms that may create an atmosphere of positive or negative biases toward going to college, social cohesion will be accounted for in upcoming sections.

Social capital theory has been applied within multiple disciplines of research, but its origins lie within economics from Bourdieu's (1986) descriptions – which favored social network analysis over social cohesion. Scholars have adapted Bourdieu's (1986) definitions to fit a multitude of applications for social capital, but within communication studies, scholars continue to disagree on how the theory describes the value inherent to social networks that individuals find themselves embedded in. The disagreements lie in the functionality of social capital (i.e. what spurs the actor to action). In social cohesion scholarship, social capital causes the action, and social trust (or lack thereof) is the immediate output (Lee & Sohn, 2016). In social network approaches, social capital is merely a resource inherent within social networks the actor can use if they choose (Lee & Sohn, 2016). Bourdieu (1986) defined social capital as “the aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance and recognition” (p. 51). Bourdieu (1986) described social capital based on his view of economics – as a positive resource.

While Bourdieu (1986) is credited with first coining the phrase social capital, Coleman (1988) is commonly referenced for advancements in the theory. He defined social capital “by its function” (Coleman, 1988, p. 98). To Coleman (1988), social capital is a more abstract form of capital than human or physical capital, because “it inheres in the structure of relations between actors and among actors” (p. 98). While physical capital gains value by changes made to physical objects, and human capital gains value by adding skills and knowledge to individuals, social capital's value lies within the *strength* of relationships (Coleman, 1988, emphasis added). Some relationships may be closer or weaker depending on the amount of attention an individual gives each relationship. Coleman (1988) described the structure of social networks and how

different levels of closeness and distance within relationships may have distinct functions for an individual's social capital. For instance, closed social networks influence social norms more effectively than open social networks (Coleman, 1988). Closed social network relationships are maintained by both parties and offer a sense of trustworthiness for the flow of information offered. Important to Coleman's (1988) descriptions of social capital is the understanding that social capital is merely one facilitator of actions and individual can take and cannot be contained within a single unit (Coleman, 1988). Essentially, because social structures are vast and serve a variety of purposes for an individual, so too are the functions social capital encompasses. This means certain relationships may be more valuable than others for individuals depending on situational contexts.

Coleman (1988) agreed with Bourdieu (1986), that social capital was a resource, but while Bourdieu (1986) viewed social capital as intrinsically positive, or potentially positive – from an economist's perspective, Coleman (1988) acknowledged social capital can cause both positive and/or negative actions for an individual. Thus, Coleman's (1988) adaptation of social capital should be considered a neutral approach with the potential to be either positive or negative. For this analysis, the definition of social capital will fall most closely with Coleman's (1988) definition; social capital is *a resource that can cause an individual to perform an action that may be either beneficial or harmful for the individual*. Byun, Meece, Irvin and Hutchins (2012) described three structural forms of social capital that relate to rural student educational success: school social capital, community social capital, and family social capital.

**School social capital.** Under Coleman's (1988) differentiation of closed and open social networks, school social capital would fall within the boundaries of open social networks since these networks are maintained with weak-tie relationships. These weak-tie relationships, like

those formed early in a student's college career, are necessary for access to information not available to them in their close-tie relationships (Ganss, 2016). However, trust will not be as easily earned in open social networks as in closed social networks, but trust in relationships is necessary to utilize information school social capital can provide (Coleman, 1988). Trust in relationships formed at college may provide a way to operationalize Tinto's (1975; 1993) social integration that is especially important for first year students to persist to graduation.

School social capital has been operationalized in past quantitative research within the boundaries of a rural high school setting to include a variety of factors including: size of classrooms, students' and parents' relations with teachers, and extracurricular involvement, essentially, every interaction that involved authority actors from a high school was considered school social capital (Byun, Meece et al., 2012; Nelson, 2016). In college, the size of classrooms will likely be larger than a rural high school setting, and it is expected parents may not have relations with students' college instructors. To adapt school social capital to the college setting, the size of classrooms and parents' relations with teachers can be viewed more generally as authority and peer relationships formed at college including interactions with faculty, staff, administration and peers. All of these interactions were highlighted by Tinto (1993; 2012) as areas to analyze to understand the likelihood of persistence.

Originally, Coleman (1988) classified peer networks within community social capital, but Nelson (2016) shifted peer networks to school social capital since these relationships were often formed within a school setting. This analysis will follow Nelson's (2016) reclassification with the understanding that a college setting is even more removed from the home community than high school. For this study, school social capital will encompass two levels in the context of relationships formed at college: peer networks and authority relationships.

First, peer networks formed at college constitute a form of social capital that may not be available anywhere else for a student. Peer networks hold the potential to create social norms that may influence a student's behavior (Coleman, 1988). For instance, in a high school setting, peer networks may be a source of support in the way of positive social pressure like hitting college application deadlines (Nelson, 2016). Social norms created by peer networks can extend into the college setting as well. Peer norms, meaning, close friends' understanding of how important it is to succeed in college, can set a standard for academic success in college for a group of students (Wohn, Ellison, Khan, Fewins-Bliss & Gray, 2013). Peer networks can create a culture of normalization for what college success should look like, or, as with all potential for social capital, they may have a negative influence on a student.

Peer networks may be realized through formal and informal means (Fischer, 2007). Formal ties include organizations a student is a part of on campus that may increase interaction with peers. Formal institutional first-year seminars can provide opportunities for a student's first involvement with other peers on campus and are formal ties (Friedman & Alexander, 2007). First-year seminars (FYSs) are a class a small group of first-year students takes together to promote academic achievement, personal success and student satisfaction (Friedman & Alexander, 2007). FYSs are often linked to learning communities, which involves multiple classes taken by the same small group of students and generally enhance the benefits gained for student social integration (Friedman & Alexander, 2007; Pascarella & Terenzini, 2005). In terms of persistence, FYSs can provide benefits for male and female students, minority and majority students, residential and off campus students, students of various ages and students from various majors all benefit from involvement in FYSs programs (Goodman & Pascarella, 2006). Universities are generally well aware of the importance of integrating first year students into

campus life, as first-year seminars and learning communities have increasingly become more common in the last few decades (Friedman & Alexander, 2007; Pascarella & Terenzini, 2005; Tinto, 2012).

But it's not just university-initiated peer groups that provide students opportunities for peer interactions; student-initiated organizations must also be explored within formal tie peer networks. Memberships in campus organizations positively affects student satisfaction with life at college and subsequently increases their likelihood to persist to graduation (Bean, 1983). Peer norms at college can be realized through social clubs like those found in Greek systems on college campuses (Bean, 1983; DeBard & Sacks, 2010). Students from rural areas who participate in social clubs like sororities and fraternities are more likely to complete a bachelor's degree than rural students who do not participate in these social clubs (Byun, Irvin et al., 2012). In this example, social clubs served as positive school social capital that created peer norms pushing individuals to persist in college. However, these social ties are more effective if formed with on campus partners for social integration. Students that reported having more friends off campus than on campus had poorer GPAs than students more fully integrated within campus peer networks (Fischer, 2007). This example displays the importance of formal ties within peer networks; structures like social clubs or first year seminars may create opportunities for students to interact with their peers in informal ways.

While formal ties are generally opportunities created by university structures, informal ties, like having friends on campus also affect students' decisions to stay in college (Fischer, 2007). Without informal peer ties, or simply, having friends on campus, students are more likely to depart before graduation (Fischer, 2007). Informal ties on campus also may increase grade performance for student (Fischer, 2007). This instance shows the overlap Tinto's (1993) social



integration can have with academic integration (e.g., grade performance and success in the classroom).

Moreover, Ganss (2016) emphasized the positive association with first-generation students successfully acclimating to a college environment with peer relationships formed early in a college career. Ganss' (2016) research replicates Tinto's (1993; 2012) findings that the sooner peer relationships are formed in college, the more integrated a student may feel in their college community. Peer networks may serve a variety of purposes for a college student. But notably, both formal and informal ties within peer networks can create social norms (e.g., positive or negative) that influence behavior in school (Nelson, 2016; Wohn et al., 2013). Peer networks can be realized through first- year seminars (Friedman & Alexander, 2007; Goodman & Pascarella, 2006), through involvement in social clubs on campus (Bean, 1983; Byun, Irvin et al., 2012; DeBard & Sacks, 2010;) or by simply having friends on campus (Fischer, 2007). But integration into social systems on campus is on a timeline, namely, the sooner these peer relationships are formed, the better for a student's likelihood to persist (Ganss, 2016; Tinto, 2012). Peer networks are an important part of school social capital, but authority figures on campus can also be a source of social capital.

Research in higher education is clear on its conclusion for the importance of student interactions with faculty members on a college student's development (Endo & Harpel, 1982; Gist-Mackey et al., 2018; Kuh & Hu, 2001; Pascarella & Terenzini, 2005; Tinto, 1993). The positive outcome areas of these interactions include but are not limited to satisfaction with life at college (Kuh & Hu, 2001), retention (Tinto, 1993; 2012) persistence (Endo & Harpel, 1982; Pompper, 2006; Tinto, 1993; 2012) and academic motivation (Pascarella & Terenzini, 2005). Scholarship also describes the nature of the faculty/student interactions. For instance, Gist-

Mackey et al., (2018) described informational and emotional support offered by faculty; Endo and Harpel (1982) described informal and formal faculty interactions with students; and Kuh and Hu (2001) utilized substantive and out of class interactions terminology.

In general terms, the nature of faculty/student interactions comes down to logistical conversations aimed toward classroom and academic information and friendly conversations where faculty members show interest in the overall well-being of a student. Both types of interactions may play a significant role in how school social capital is formed. However, there are a few factors that may keep students from interacting with faculty; uncertainty and accessibility barriers.

In high school, guidance counselors, teachers and staff play an important role in both disseminating information to and supporting first-generation rural students aspiring to a college degree (Nelson, 2016). These interactions were described in positive ways when authority figures in high school would seek out first-generation students and form close bonds with them rather than waiting for the students to ask them for help (Nelson, 2016). While high school teachers and counselors are instrumental in helping students, particularly first-generation students, get to college, these students may arrive on a college campus unaware of how the college structure works and without contacts on campus to help them (Gist-Mackey et al., 2018). Students may not know who to ask for information about college processes. But students do have frequent access to faculty members that teach their classes.

However, students may feel intimidated and be reluctant to approach faculty (Hurtado, Eagan, Tran, Newman, Chang, & Velasco, 2011). Hurtado et al. (2011) found students reported an unwillingness to approach faculty members if certain accessibility cues were absent. These cues involved mostly in class behavior by the instructor like whether the teacher invited students

to ask questions during class or not (Hurtado et al., 2011). For most students, these accessibility barriers were not broken through until the third semester of college when interactions with faculty increased dramatically (Hurtado et al., 2011; Kuh & Hu, 2001) which is highly undesirable as Ganss (2016) and Tinto (1995; 2012) emphasize the importance of social ties being formed as early as possible in a college student's career to aid in a student's social integration into campus life.

Once students access the informational resources faculty can offer, authorities at school can provide logistical knowledge for students who may have information gaps when it comes to college processes (Gist-Mackey et al., 2018). Information gaps may include lack of understanding about class scheduling differences between high school and college, for which academic advisors can play a key role in communicating information during their one on one meetings with students (Gist-Mackey et al., 2018). In some cases, instructors in college may offer information to students that can help connect them with university services (e.g., counseling services) or how to connect with student organizations that may provide opportunities to create a socially supportive peer network (Gist-Mackey et al., 2018).

While authorities at college are important for communicating logistical information to students, they also play a supportive role in student well-being. By simply talking to students about logistical information students may realize they do not have to navigate these processes alone and may feel supported by the university (Gist-Mackey et al., 2018). Additionally, by increasing the frequency of faculty/student interactions students may perceive support from authorities at the academic institution (Endo and Harpel, 1982; Pompper, 2006). This support may come in the form of encouragement as instructors can help communicate reassurance to rural students who are struggling to balance family social ties and school obligations (Hlinka,

2017). Informal faculty interactions may also increase a student's likelihood to get involved with extra-curricular activities (Endo & Harpel, 1982). But there must be a balance between logistical conversations and supportive conversations. Students that engaged with faculty members in only formal way (interactions limited to specific intellectual or academic topics) reported feeling less satisfied with their education than students that reported higher informal (interactions that involved a wider concern for student development outside of the classroom) interactions with faculty members (Endo & Harpel, 1982; Hurtado et al., 2011). However, informal interactions that centered around meeting for food and drinks may not be beneficial for a student's satisfaction at college or their academic motivation (Kuh & Hu, 2001). Instead, informal interactions may be most beneficial if they happen after class or by faculty inviting students to office hours to talk through logistics of success in college and ensure students are acclimating properly to the college environment (Kuh & Hu, 2001). Students may feel most supported when a faculty member reaches out to them first, initiating contact and breaking down accessibility barriers.

Overall, relationships with authority figures at college may play a significant role in the formation of school social capital. These interactions may fill both logistical and well-being needs for students (Endo & Harpel, 1982; Gist-Mackey et al., 2018; Hlinka, 2017; Hurtado et al., 2011; Kuh & Hu, 2001). But students may be uncertain about who to ask for information, and reluctant to approach faculty members (Gist-Mackey et al., 2018; Hurtado et al., 2011). It is especially important faculty either offer accessibility cues so students feel comfortable approaching them or seek students out first (Hurtado et al., 2011). These interactions must begin happening as soon as possible to have a greater impact on a student's likelihood to persist (Ganss, 2016; Tinto, 2012). While school social capital may provide one area of social norms

and support that may influence a student's behavior in college, immediate family members may also play a role in communicating information that may be helpful or hurtful to a student's likelihood of persistence.

**Family social capital.** While school social capital is important for student social integration into college, a student's immediate family also plays a significant role in their transition to college (King, 2012; Wang, 2014). Especially for first-generation student transitions, "parental support can demonstrate interest in college, make the transition to college easier, and increase the likelihood of student success" (Wang, 2014, p. 281). Family social capital is generally understood to mean close-tie relationships and are formed within the immediate family structure (Coleman, 1988; Kao & Rutherford, 2007). Past research operationalized family social capital as both descriptive characteristics of a family and the processes of the youth's family (Byun, Meece et al., 2012). The descriptive characteristics of family structure included whether youth were raised in a one or two-parent household, the number of siblings youth had, and if those siblings dropped out of high school (Byun, Meece et al., 2012). The descriptions of a student's family in Byun, Meece et al.'s (2012) study show the potential for information to flow among these close-tie channels. However, the descriptions of a student's family (e.g., number of siblings and parents in the house) merely show potential information to be offered a student, the infrastructure of relationships, not the actual information flow. Family processes may more adequately describe communication among family structures.

Past research has shown how the structure of a family may affect the amount of social capital a child has available to them (Byun, Meece et al., 2012; Freistadt & Strohschein, 2012; Sandefur, Meier, & Campbell, 2006). However, if families do not have access to some of the following examples of influential family structures, students may be able to surpass negative

family social capital by talking about college in a positive way. For instance, to help disseminate positive family social capital in terms of student persistence, parents can communicate to their children how they accomplished what they have and why it is important to succeed in college and have similar outcomes as parents that may be able to provide some of the family structures described below (Sandefur et al., 2006). Specifically, these structures include number of parents in the household, parent education levels, number of siblings, and family income.

In general, scholarship supports the notion that two-parent households have more available information and support to offer their children than do single-parent households (Freistadt & Strohschein, 2012; Sandefur et al., 2006). Two-parent households reported having more time to connect and introduce their children to members of their community, forming relationships that may be beneficial in terms of information and support for their children (Freistadt & Strohschein, 2012). Byun, Meece et al. (2012) also found students from two-parent family households were more likely to pursue higher education than students from single-parent households. This relationship was explored further by Byun et al. (2017) wherein they note rural youth from two-parent households were more likely to attend a four-year college than a two-year college.

As Coleman (1988) described, close social ties can create social norms for individuals embedded in a social network. It would follow then that having parents attend college would create a norm for their children to also attend and finish college (Sandefur et al., 2006). Rural youth who had parents with a four-year degree are more likely to attend a four-year college, either initially after high school or after attending a two-year college (Byun et al., 2017). However, rural students may also belong to families and communities with lower levels of education than their peers from more urban areas, which may put rural students at a disadvantage

for family social networks to rely on while navigating college processes (King, 2012). King's (2012) finding that rural students were more likely to be first generation than students from other community locales was supported by research from Byun, Irvin et al., (2012) and Estes et al. (2016). If students do not have access to adults who can communicate advice about college, they must rely on what Coleman (1988) describes as weak-tie relationships, perhaps those formed while at college.

Family structure also extends to the number of siblings a rural student has; however, past research has not shown a positive correlation to the number of siblings an individual has and likelihood of going to college (Byun, Meece et al., 2012; Nelson, 2016). While the number of siblings may not affect a student's educational outcomes, having at least one older sibling may be beneficial to socially integrating into college life (Nelson, 2016). Siblings are also instrumental in passing down useful information to younger siblings about education, like how schedules in high school work, when lunchtimes are, and how to study for the SAT (Gillies & Lucey, 2006). In these examples, the social capital passed among siblings may offer information parents may not know.

Last, family income may affect students' family social capital. Rural students specifically are less likely than urban students to come from families who earned \$50,000 or more annually (Byun, Irvin et al., 2012). And, family income can impact whether rural students persist to achieving a college degree (Sandefur et al., 2006). Students whose family income is below \$25,000 are less likely to earn a bachelor's degree than those whose family income is \$50,000 or above (Byun, Irvin et al., 2012). When low SES is coupled with first-generation status, students are less likely to persist to degree completion than first-generation students of a middle-class background (Somers et al., 2004).

Family structures provide an opportunity to forward social capital to children aspiring to college. Specifically, type of parent household, parent education levels, number of siblings and family income may provide benefits or drawbacks for students in college (Byun, Irvin et al., 2012; Estes et al., 2016; Freistadt & Strohschein, 2012; Gillies & Lucey, 2006; King, 2012; Methany & McWhirther, 2013; Nelson, 2016; Somers et al., 2004). As Coleman (1988) posited the more close-tie relationships a student has access to the more potential for information available to individuals embedded in these social networks. However, family descriptions only provide a glimpse of the structures that may provide information to a student. As Sandefur et al., (2006) found, the communication that flows among family structures may better indicate a student's success in education, specifically through family processes.

Research has demonstrated both the importance of establishing family norms for children's success in education and the importance of communication to help overcome structural barriers that may be inherent within family networks (Methany & McWhirther, 2013; Sandefur et al., 2006). Coleman (1988) explained it is not enough to know the structure of a family, but surveys must encompass how families *relate* to their students to understand the larger availability of potential positive or negative family social capital. Family processes include parental expectations of college enrollment (Byun, Meece et al., 2012) and parental concerns about the cost of college and provide a second layer to Coleman's (1988) suggestion of describing how families relate to their children.

In general, family expectations may be coupled with family support in terms of the benefits provided by social norms and communication within a family (Methany & McWhirther, 2013). In earlier research, Byun, Meece et al. (2012) found a general correlation between parental education expectations and students' likelihood to complete a four-year college degree.



When rural students were isolated in the data set, Byun, Meece et al. (2012) found if rural youth perceived their parents' expectations of them to pursue a bachelor's degree, they were more likely to finish college than those students who perceived their parents did not expect the same. Parental expectation as a form of family social capital appeared again in Nelson's (2016) ethnographic study of rural youth in Maine. For rural students who lacked a collaborative approach with their parents in applying for college, there was limited support in "researching institutions, completing applications, meeting deadlines, and securing funding" (Nelson, 2016, p. 261). When parental collaboration is absent, rural students must either engage in guess work to navigate the college application process or find different forms of social capital for support. However, family support more generally could play a mediating role in any negative effects lower SES had on a college student's self-efficacy (Methany & McWhirter, 2013). Essentially, positive communication in the form of encouraging a student regularly may help reduce the negative effects a lower family income might have on a student's perceptions of how well they can succeed in college.

For first-generation college students more generally, family expectations may also take the form of the importance of remembering family while away at college (Wang, 2014). In Wang's (2014) qualitative study of first-generation college students' experiences with messages from their parents, the author found while many parents encouraged their children to become the first in their family to pursue a four-year college degree, this encouragement was coupled with requests to still make family a priority in the student's daily life – sometimes to the detriment of school work. While daily communication with parents may require students to allocate time away from school and possibly jobs, it does reveal an open line of communication between student and parent (Wang, 2014), which may create tighter social bonds within family social

capital. It is worth noting for some first-generation students, the parental focus was on creating new family traditions that involved members being college educated (Wang, 2014). New family traditions may create social norms for younger siblings within a family unit (Wang, 2014), that will help foster family expectations towards a college education, which in turn may influence how social capital is enacted within an immediate family structure.

While family expectations and support of a student's college success may be influential in a student's likelihood to persist, parents may also communicate their concerns about the financial toll attending college may have on a family. For instance, parents of low SES students are more likely to emphasize the financial constraints of attending college than are parents of continuing generation students (Nelson, 2016), and this can discourage students from applying to college or persisting to completing college. For continuing generation students, parents are better able to dispel fears about paying for college than parents of first generation students. In fact, for every \$1,000 awarded in some form of financial aid (grants, loans, and work-study), the likelihood for first generation students to persist to graduation increases at least 5% per award (Somers et al., 2004). Debt accumulation can also play a role in first generation college student persistence. Those who accumulated the lowest amounts of debt throughout the college experience are more likely to make it to graduation than those who had accumulated the highest amounts of debt (Gross et al., 2007; Somers et al., 2004), suggesting first generation students, and possibly their parents have an aversion to taking on high levels of debt to receive a higher education. The authors attribute this to a limited knowledge of financial aid and student loans for first generation families (Gross et al., 2007; Somers et al., 2004). Perhaps if parents are unaware of financial resources available to help students attend college, they may be less likely to support a student's decision to enroll in college.

Overall, while family structures may describe the potential for beneficial or negative information to reach a student, family processes describe the effects certain types of communication may have on a student's likelihood to persist in college. Specifically, literature describes how parents' expectations and support of students in college (Byun, Meece et al., 2012; Methany & McWhirter, 2013; Wang, 2014) and their concerns about the cost of college (Gross et al., 2007; Nelson, 2016; Somers et al., 2004) may influence the educational outcomes of a student. Social norms can be created within school and family social networks; however, home community social networks may also affect a student's likelihood to persist in college.

**Community social capital.** Research has demonstrated how a student's home community can influence the educational outcomes of a child (Adedokin & Balschweid, 2008; Coleman, 1988; Elkins et al., 2000; Howley, 2006; Israel & Beaulieu, 2004a; King, 2012). Specifically, community structural and social elements, especially in rural communities, can aid or inhibit youths' educational aspirations (Israel & Beaulieu, 2004a; King, 2012). Given one of the key benefits of social capital to be gained is information (Coleman, 1988; Rojas, Shah, & Friedland, 2011), having close-tie relationships within a community that lack information about college can be a drawback for someone attending college when their family or close community members did not. The benefit of information lies within the potential of social capital, meaning social capital does not always function as a means to gain valuable information from social ties, but when it does, gaining information can spur an individual to action (Coleman, 1988; Rojas et al., 2011). This research includes community social capital alongside family and school social capital to access a more complete picture of the social networks that communicate information to youth in their first year in college.

If family social capital is accessed through closed social networks, and school social capital in college is realized through open social networks, then community social capital sits at the intersection of closed and open social networks (Coleman, 1988). Community social capital encompasses both communal structures and social interactions (Coleman, 1988); these structures are the community institutions people hold memberships with (whether official or unofficial) that may lead to social interaction (Coleman, 1988). Membership in these institutions aid in forming social norms and trust within a community (Coleman, 1988). It is through membership to organizations and social interactions with community members that community social capital can disseminate information.

Small rural communities experience a form of community social capital unique from larger urban areas because of what Coleman (1988) terms “intergenerational closure;” meaning people in a community are in close interaction with one another. Intergenerational closure is strongest when social ties overlap within multiple contexts (Coleman, 1988). For instance, when community members know other community members as neighbors, through religious groups, school activities, and various other community organizations together (Coleman, 1988), social ties become stronger and social norms more likely observed (Adedokin & Balschweid, 2008; Coleman, 1988; Rojas et al., 2011). The more closed a social network, or the more these social networks overlap, the more trust exists within a community (Coleman, 1988). For smaller communities (like rural areas), these social ties may be closer, but not as close as family social capital. It is the closeness of a community, or intergenerational closure that dictates how closely social norms will be followed by community members (Coleman, 1988). Social norms created by a community may have positive or negative impacts on the individuals within.

These community-created social norms can greatly benefit a community by creating a public interest in a collectivity (Coleman, 1988). For youth in a rural community, the benefits of social norms can be seen in community involvement in school activities, which strengthen community social ties and encourage students to do well academically (Byun, Meece, et al., 2012; King, 2012). Israel and Beaulieu (2004a) also demonstrate the importance of youth involvement in a rural community, as membership in community organizations and religious groups can have a positive influence on students staying in school or aspiring to higher levels of education. The reverse situation is also beneficial to rural students, as community mentoring programs within a high school can lead to increased college educational aspirations (King, 2012). Essentially, the more involved a student is in their home community, and community members hold a vested interest in the success of their students, the more positive influence community social capital can have on college students persisting to graduation.

Norms within a community are maintained not only by extensive membership within community structures, but by rewards (Coleman, 1988). Observance of social norms can be rewarded through “support, status, honor” and other means (Coleman, 1988 p. 104). However, community social capital may not always positively affect students. Nelson (2016), found high school students from rural areas reported always being conscious of their actions because their community members knew who they were. Hence, deviant actions can be restricted through social networks that extensively overlap. However, the power within a community to create social norms that allow people to act in the interest of the collective good means individuals may have to forgo their own self-interests (Coleman, 1988). Herein lies the potential for community social capital to have a negative effect on community members. As Coleman (1988) describes, individuals must often make a choice: the community good or their own self-interest.

A community with strong and effective norms about young persons' behavior can keep them from "having a good time." ... Even prescriptive norms that reward certain actions, like the norm in a community that says a boy who is a good athlete should go out for football, are in effect directing energy away from other activities. Effective norms in an area can reduce innovativeness in an area, not only deviant actions that harm others but also deviant actions that can benefit everyone (Coleman, 1988 p. 105).

Restricting actions of an individual in favor of community good also plays into the college application process. Students from rural communities reported limiting their choices of college based on how close the college was to their home community (Israel & Beaulieu, 2004a; Nelson, 2016). Given few colleges and universities are in a rural setting, this can leave some rural students with limited options for which college, if any, they pursue. Additionally, respondents in Nelson's (2016) study reported community members were not supportive in their college choice, and some respondents cited community members displaying anti-college sentiments. These community members may include teachers in high school, close peers and extended family members. Since social norms are rewarded in closer connected communities, it can be especially tough for rural students who wish to break or weaken community ties by leaving their community for college as exemplified in Byun, Meece, et al.'s (2012) study which found strong community ties had a negative effect on college education aspirations for rural youth. Leaving a community does not benefit the public good, instead, it may be interpreted as an act of self-interest.

Beyond the immediate family, some first-generation college students may experience a push back from extended family members for attending a university (Gist-Mackey et al., 2018).

These findings speak to a disconnect experienced between first-generation college students and their family members that may not be experienced by continuing-generation students.

Additionally, a community more generally may inhibit a student's likelihood to persist in college if community views toward college are negative (Elkins et al., 2000). For instance, a first-generation student may be breaking with family tradition by enrolling in college or breaking with the norms established by high school friends who did not attend college (Elkins et al., 2000).

But it is not just the people that can tie members to a community, it is also the geographic place of a community (Sherman & Sage, 2011). Young people that leave rural communities express feelings of attachment to the location of their town or village years after they have left (Jamieson, 2000). For rural communities specifically, the value of a place has been demonstrated by families expressing a higher rate of unwillingness to leave their home town for a better job than urban families (Howley, 2006). Even when economic opportunities arose, rural families chose their geographic place over better financial stability (Howley, 2006). This demonstrates how a place may inhibit aspirations of leaving, if the community bonds to people and place are close enough to warrant a sense of homesickness. As expected, this trend extends to youth. Higher percentages of rural youth chose to stay in their home communities in lieu of an education when compared to youth from urban areas (Howley, 2006). And, these strong community ties to place and people can be a challenge for those who join the community late. While rural community social ties are tight knit for those who participate, they have also likely been in place for a long time (Adedokin & Balschweid, 2008). Any change to those static social ties can lead to mistrust, which can break down the potential benefit of social capital (Coleman, 1988). In other words, it takes time to build trustworthy relationships that will produce beneficial community social capital.

Once a student has separated from a home community, they must incorporate themselves into their new college community, as Tinto (2017) explained they must form a sense of belonging, or one's active engagement within the college community. A strong sense of belonging means students view themselves as accepted members of their college community. Students who are unable to reject certain home community values are less likely to continue into their second year of college (Elkins et al., 2000). Separating, or breaking away from home communities can be especially tough for first-generation, rural students where social ties are close (Elkins et al., 2000; Tinto, 1993). Wang (2014) furthered, "Students' success in responding to transition depends on the resources they have at their disposal, specifically how adequate these resources are in helping them manage the challenges that are embedded in transition" (p. 281). Essentially, the more vast and varied the types of relationships an individual has at their disposal, the more access they may have to information and support for their college journey.

Relational resources can be found in multiple social systems: family, school, or home communities. These relationships may provide benefits or drawbacks for students who rely on them during transition periods and can be understood as social capital embedded in social networks (Coleman, 1988). Taken together, this study seeks to assess college student persistence, and more specifically, rural college student persistence, through the lens of social capital. Based on the existing literature, the following research questions are posed:

**RQ1:** *To what extent does social capital contribute to first year students' intent to persist?*

**RQ2:** *Does the intent to persist differ for rural versus nonrural students?*

**RQ3a:** *Does the level of school social capital differ for rural versus nonrural students?*

**RQ3b:** *Does the level of family social capital differ for rural versus nonrural students?*



**RQ3c:** *Does the level of community social capital differ for rural versus nonrural students?*

## **Chapter 3 - Methods**

Tinto (2012) explained the first step in understanding persistence at a localized level was to disseminate surveys to identify key areas where attention to student persistence might be lacking at the university level. The variables selected in this study were drawn from past literature and are focused on communication processes at a localized university to satisfy both Coleman's (1988) and Tinto's (2012) suggestions. Survey analysis was deemed the best fit for this study to begin identifying key areas a university might need give more attention concerning student persistence.

### **Participants**

Data was collected from students enrolled in the spring semester of public speaking at a large Midwestern university through the use of the communication studies department research pool. Public speaking sections were chosen because it is a required class for the vast majority of degree seeking students. To be considered eligible for the survey, participants must have: (1) been enrolled at the selected university as a freshman, (2) been enrolled in a high school the year immediately prior to taking this survey (to target students coming immediately from their home communities) and (3) been at least 18 years old. The author sent a survey link to the selected instructors which was then sent on to students and extra credit in the course was offered in exchange for their participation. All participation was voluntary, and it was communicated to all participants that choosing not to fill out the survey would not negatively impact their grade in the course. Students were provided with an alternative assignment should they choose not to participate. Additionally, a university-wide first-year experience program circulated the survey for students enrolled in the first-year experience program, which yielded an additional 16 participants. All participants were entered into a drawing for gift cards in exchange for their

time. This yielded a total of 151 responses; however, some participants were excluded from the study if they did not finish the survey or meet survey requirements ( $n = 50$ ). Unfortunately, responses were also removed from the study if they were deemed to be duplicates (based on qualitative answers given) or if they were outliers in the data set (e.g. someone reported they commuted 0 miles to their high school, indicating possible homeschooling and another responded they were 21 years old, but in high school last year, indicating circumstances not typical for the rest of the data set).

In all, 101 responses were included in the final sample with 50 participants identifying as male (49.5%) and 51 identifying as female (50.5%). The participants were primarily Caucasian (80.2%), followed by Hispanic (7.9%), biracial (7%), African American/Black (3%), Asian (1%) and Native American (1%). Given restrictions placed for being a freshman in college who had been a senior in high school the previous year, all participants were either 18 (32.7%) or 19 years old (67.3%), ( $M = 18.67$ ,  $SD = .47$ ).

The participants reported high school graduating class sizes that ranged in population size from 12-2000 students ( $M = 310.89$ ,  $SD = 247.66$ ). Nearly two-thirds of the participants reported at least one parent with higher education, often a bachelor's degree. For instance, 73.7% of respondents had a mother achieve an associate degree or higher. Seventy-four-point four percent of respondents had a father achieve an associate degree or higher. And for respondents with step-parents, 72.7% had achieved an associate degree or higher. Ninety-six percent of the respondents reported they had a sibling; specifically, 37.6% respondents had one sibling, 33.7% had two siblings, and 14.9% had three siblings. Of those who reported having siblings, 50.5% of siblings had gone to college, but only 26.7% completed their degree.

## Procedures

IRB approval was sought before sending surveys to participants (Appendix A). Once approval was acquired, surveys were sent via email and a link that led to a Qualtrics survey (Appendix B). Once on the survey landing page, participants were informed of the purpose of this study and asked to provide consent and verify they met the qualifications for this study (e.g., at least 18 years of age, enrolled in high school last year, and enrolled currently at the selected university). Once eligibility was confirmed, participants were asked to reflect on the relationships they formed while at college, both with university staff/faculty and peers followed by series of measures related to those relationships and social capital. This same process was repeated for immediate family relationships and community relationships. Past literature guided the variables used in this study and are highlighted in the measures below.

## Measures

**Intent to persist.** Since this study was not longitudinal, but rather a snapshot of the first year of a student's college experience, the first independent variable was an indicator of student intent to persist to degree completion. To measure the intent to persist, two subscales from Terenzini and Pascarella's (1980) Persistence/Voluntary Dropout Decisions (P/VDD) scale that targeted the likelihood of a student's persistence to degree completion were combined. The first subscale, Institutional and Goal Commitments was measured on a five-point Likert scale (1 = strongly disagree, 5 = strongly agree) and consisted of six items including, "It is important for me to graduate from college." The second P/VDD subscale, Academic and Intellectual Development was measured on a five-point Likert scale (1 = strongly disagree, 5 = strongly agree) and consisted of seven items including, "My interest in ideas and intellectual matters has increased since coming to this university." These two subscales were averaged to create one

likelihood of persistence variable and together reached acceptable reliability (Appendix C, Table 1).

The second independent variable concerned type of home community grouped into either a rural or nonrural community. To distinguish between nonrural and rural students, participants were asked to self-report their home county classification into metro (55.4%) or nonmetro (45%). Past research suggests given how murky the definition of rural can be (Bitz, 2011), self-report is ideal in allowing students to share their experiences (Tieken, 2016). The use of “metro” and “nonmetro” to refer to rural and nonrural locations is not uncommon within the existing literature (Beasley, 2011; Bitz, 2011; Byun et al., 2017; Tieken, 2016; Tucker, 2010), and thus was selected as the terminology to avoid any potential negative connotations associated with the term rural. Despite the terminology used in the survey (e.g., metro or nonmetro), the rest of this study will refer to “metro” responses as nonrural, and “nonmetro” responses as rural with further explanation in chapter six.

**School social capital.** The first dependent variable in this study is school social capital which was measured through two levels: peer relationships formed at college and authority figures at college. To measure peer networks formed at college, the Peer-Group Interactions (PGI) subscale of the P/VDD scale was used (Terenzini & Pascarella, 1980). This scale had acceptable reliability (Appendix C, Table 1). This scale was measured on a five-point Likert scale (1 = strongly disagree, 5 = strongly agree) and consisted of seven items including, “Since coming to this university I have developed close personal relationships with other students.” Additional single item questions about the number of social clubs participants were involved with and whether they were enrolled in the university-wide first-year experience program were asked to measure how immersed participants were in formal peer ties at their university.

Authority relationships at college were measured using two subscales of the P/VDD scale (Terenzini & Pascarella, 1980). The first subscale, Interactions with Faculty was measured on a five-point Likert scale (1 = strongly disagree, 5 = strongly agree) and consisted of five items including, “Since coming to this university, I have developed a close, personal relationship with at least one faculty member.” The second P/VDD subscale measuring authority relationships, Faculty Concern for Student Development (FCSD) was measured on a five-point Likert scale (1 = strongly disagree, 5 = strongly agree) and consisted of five items including, “Most of the faculty I have had contact with are interested in helping students grow in more than just academic areas.” These two subscales were combined to create an authority relationships variable and had acceptable reliability (Appendix C, Table 1).

**Family social capital.** Family social capital, the second dependent variable, was measured through two levels as discussed in the literature review: descriptive characteristics of a family and family processes. Descriptive characteristics were measured through several single items all tied to describing the participant’s family structure and educational backgrounds. This included questions about a student’s family structure while in high school (single or double parent households), the level of education for parents, the number of siblings a respondent has, whether siblings went to college or not, and if siblings completed their degree. Display logic was utilized in Qualtrics to address the participants that identified living with step-parents and whether divorced parents were remarried or not. Additionally, participants were asked to report what they thought their family income was last year (1 = less than \$15,000, 6 = \$100,000 or more).

Family processes included the respondent’s perceived parent educational expectations and support for the participant and the extent to which the cost of college for the family affected

the participant. To measure family expectations, the Familial Expectations subscale and the Concern About Costs subscale derived by Winkler (2013) were used. Both subscales were measured on a five-point Likert scale (1 = strongly disagree, 5 = strongly agree). The Familial Expectations subscale consisted of three total items, including, “My family encouraged me to consider other paths in life than attending college” (reverse coded). The Concern About Costs subscale consisted of five items, including, “I am confident that I can financially afford to finish my college degree.” These subscales were combined to create one family processes variable and had acceptable reliability (Appendix C, Table 1).

**Community social capital.** The final dependent variable measured was community social capital which had two levels: communal structures and community processes. To measure communal structures of a participant’s home community, several single items tied to descriptions of and the respondent’s involvement with their home community were asked. This included items about the size of a participant’s high school graduating class, the population size of their home county, whether they were involved in a religious group in high school, the number of nonreligious community organizations with which they were involved in high school/still involved with, and the number of miles participants commuted to their high school from home. These single items were not combined into one variable.

Community processes were measured through several single item questions targeted toward measuring the integration a participant had in their home community and continued to have at the time of the survey. To create a community processes variable, two items measured on a five-point Likert scale were asked. These items asked participants to indicate their level of agreement (1 = strongly disagree, 5 = strongly agree) for their home community support for higher education, including, “It is expected in my community that you will get a job right after

high school.” Additionally, respondents were asked several single item questions about their perceptions of whether certain community members encouraged them to attend college (e.g., high school guidance counselor, favorite high school teacher, high school peers, grand-parents, family friends).

**Qualitative data.** To allow participants a chance to describe any additional information not addressed in the survey, two open answer responses were included at the end of the survey. These questions asked participants to reflect back on individual relationships that influenced their successes and failures in their first semester of college, including, “Having gone through your first semester of college, who do you believe has been the most helpful and why?” and “Were you discouraged by anyone or encouraged to do something else besides college? If so, why do you think the person discouraged you or urged you to do something else?” These open-ended questions were provided as an option for students to write in answers in an effort to accompany the quantitative data for richer analysis (Benoit & Holbert, 2008).



## Chapter 4 - Results

This chapter answers the research questions posed in chapter two. SPSS was utilized to answer all research questions. To answer the first research question, a regression was conducted to predict the intent to persist based on each of the three social capital areas. RQ2 was answered by conducting an independent sample t-test to discern the differences in intent to persist between rural and nonrural students. Independent sample t-tests were also utilized to compare the mean differences between rural and nonrural students (as representative of the rural-urban student divide) for the variables of school, family and community social capital (RQ 3a-3c). The results for each of these tests follow below. Table 1 (Appendix C) notes the mean scores and standard deviations for each variable, helping to clarify further the relationships that emerged.

### **RQ1: Persistence and Social Capital**

To answer the first research question, a multiple regression was carried out to test whether the intent to persist could be predicted by possession of social capital. The predictors used in the model represented all three areas of social capital and included: family processes, community processes, authority relationships, peer interactions and the number of clubs in college a student was a part of at the time of the survey. The results of the regression show that the model explained 45% of the variance and was a significant predictor of intent to persist. Of particular interest were two predictor variables within school social capital that contributed significantly to the model, authority relationships ( $\beta = .49, p < .001$ ) and peer interactions ( $\beta = .24, p < .005$ ). The full results of the multiple regression are demonstrated in Table 2 (Appendix D).

The value of authority relationships was further seen in the open-ended responses offered at the end of the survey. These examples offered insights to the connections students made with faculty members. One student wrote, “I believe my adviser has helped me the most by figuring

out what classes I need to take and other stuff like that.” Yet another noted, “My professors have helped me a lot, as well as my advisor, to help me figure out what would benefit me in my studies and career.” Respondents also noted the importance their peer networks have on their ability to succeed in college. For instance, “My roommate has studied with me and pushed me throughout the semester. When we needed a stress reliever, we would do something together.” Another respondent noted how social clubs impacted their ability to form a community within college, “My team, the forensics team. Without them I would have the firm emotional grounding to be able to excel in college. A few friends have helped along the way too, but the bulk has fallen to the team aspect of competing regularly.” These responses further support the importance of faculty and peer interactions with students.

Overall, in answering the first research question, both levels of school social capital contributed significantly to the intent to persist. The predictor variables within family and community social capital areas did not contribute significantly to the regression model. The results of the regression show that school social capital may be more important to a student’s intent to persist in college than relationships from their family and home communities.

## **RQ2: Persistence and Rural/Nonrural Students**

To answer the second research question, an independent sample t-test was conducted to determine if there were differences in intentions to persist in college between rural and nonrural students. With a 95 percent confidence interval, there was a significant difference in the scores for rural ( $M = 4.24$ ,  $SD = .53$ ) and nonrural ( $M = 4.00$ ,  $SD = .55$ ) student groups;  $t(99) = -2.17$ ,  $p = .03$ . These results suggest that rural students intend to persist to a college graduation at a higher percentage than do nonrural students.

### **RQ3a: School Social Capital and Rural/Nonrural Students**

For research question 3a, an independent sample t-test was conducted to determine if there were differences in school social capital in the first semester of college between students from rural and nonrural home communities. Table 3 (Appendix E) demonstrates the presentation of these test results. Because the two group sizes, nonrural ( $n = 56$ ) and rural ( $n = 45$ ), are not equal, the results are shown with unequal variances using the Satterthwaite approximation for degrees of freedom within SPSS. For the first level of school social capital, peer relationships, the t-test did not show a statistically significant difference in the mean scores for rural and nonrural students. These results suggest rural and nonrural students have comparable perceptions of their interactions with peers on campus in their first semester of college. The second level of school social capital, authority relationships, showed results approaching statistical significance for the mean difference between rural and nonrural students. These results suggest rural students perceive slightly closer relationships with authority figures on campus ( $M = 3.86$ ,  $SD = .57$ ) than nonrural students ( $M = 3.65$ ,  $SD = .52$ ). Combining the two levels suggests rural and nonrural students form school social capital in comparable manners.

### **RQ3b: Family Social Capital and Rural/Nonrural Students**

To answer research question 3b, an independent sample t-test was conducted to determine if there were differences in family social capital between students from nonrural and rural home communities. Table 4 (Appendix F) demonstrates the full results of the independent sample t-test results for all family social capital variables shown with unequal variances using the Satterthwaite approximation for degrees of freedom within SPSS. Beginning with the family processes level of family social capital, there were no significant mean differences between nonrural and rural students, which suggests communication processes are similar for both groups

when families discuss college expectations and costs for college. Second, the family structure revealed interesting differences and similarities between nonrural and rural students. For instance, there were no statistically significant mean differences between the two groups of students for the level of education for mothers and fathers. There was however, a statistically significant difference between the two groups when accounting for siblings attending college ( $p < .05$ ). Rural students were more likely to have siblings attend college than were nonrural students. The significance in difference between nonrural and rural students did not carry over to siblings *completing* college, suggesting rural respondents either still had siblings still in college at the time of the survey or their siblings started but did not complete a college degree. And last, family income showed results approaching statistical significance which suggests nonrural students have slightly higher family incomes than rural students. Altogether, the results for family social capital suggest students from nonrural and rural areas have parents similarly educated and these families have similar conversations supporting their students' attendance at college. However, nonrural students were more likely to have higher family incomes, but rural students were far more likely to have siblings already beginning the college process.

### **RQ3c: Community Social Capital and Rural/Nonrural Students**

To answer the last research question, an independent sample t-test was conducted to discern any differences between nonrural and rural students in community social capital variables. Table 5 (Appendix G) displays the full results of these tests, shown with unequal variances using the Satterthwaite approximation for degrees of freedom within SPSS. Beginning with the processes level of community social capital, there were statistically significant mean differences between nonrural and rural students, which favored nonrural students perceiving their communities as more supportive of college than rural students. For the second level of

community social capital, structural, there were no statistically significant mean differences in any of the tested variables between rural and nonrural students. Community structural variables included: distance of home community from college, involvement in religious groups during high school, the number of community organizations involved with in high school (and currently within one's home community), and perceived support from high school guidance counselor, favorite teacher and peers in high school. Additionally, community process variables including respondent perceptions of encouragement from their guidance counselor, favorite teacher and peers did not show a significant difference between rural and nonrural students. Altogether, these results suggest rural and nonrural students are involved with their communities in similar ways, but nonrural student home communities support attending college more than rural student home communities.

The open-ended responses provided further insight into how community social capital may affect a student in college. One respondent wrote, "I have come across a few peers from high school that have tried to voice their opinion on discouraging college. In their opinion, you do not need a college education to make a solid foundation for yourself and get a steady job, and the debt from college is a major financial burden." However, the responses also noted how negative community social capital can be a motivating factor for intentions to persist in college as one respondent noted, "My folks didn't go to college, but they knew I was capable of making it through college. There are teachers and people in town that think I will probably drop out after a year. I have to prove them wrong because I'm the first person in my family to go to college." Overall, the responses highlighted how community social capital may be perceived as having both positive and negative effects for respondents.

## Chapter 5 - Discussion

This analysis showed how relationships and communication within social capital structures affect a student's perception of their intentions to persist to college graduation. This analysis also compared the possession of social capital between rural and nonrural students. Although social capital is a broad topic to analyze, as relationships serve a variety of functions for individuals (Coleman, 1988), this analysis encompassed as many aspects of social capital that might affect persistence into a single study as was foreseeable based on past literature. Not only were three separate areas of social capital measured (e.g. school, family and community), but each type of social capital had two levels (e.g., processes and structure for family and community and peer and authority relationships for school) to account for the unique and possibly multiple purposes each relationship has for a student's college journey. This chapter will further discuss the results in relation to the research questions and past literature.

### **The Value of School Social Capital for Persistence**

For this thesis, social capital was defined based on Coleman's (1988) approach: *a resource that can cause an individual to perform an action that may be either beneficial or harmful for the individual*. School social capital was the strongest predictor for intent to persist of the three types of social capital, which, drawing from Coleman's (1988) definition, suggests school social capital holds the biggest potential to influence behaviors of students in terms of persisting to graduation. Specifically, this study demonstrates that strong school social capital can potentially help students overcome any negative aspects of family and community social capital. Regardless of structural elements in a family or community that may negatively impact a student, the ability to form connections with faculty and peers on campus proved most important in a student's likelihood to persist. This is furthered by the qualitative responses offered as

exemplars; wherein participants noted the influence of their instructors, academic advisors and peers at college.

The regression results from this study suggest both levels of school social capital (i.e., peer networks and authority relationships) significantly predict students' intentions to persist. First, the results of peer network correlations are in line with past literature suggesting social integration into peer networks on campus plays a uniquely important role for student persistence (Bean, 1983; Byun, Irvin et al., 2012; DeBard & Sacks, 2010; Fischer, 2007). However, this analysis measured formal ties on campus through direct measures by asking students about the number of clubs they were involved with, informal ties were addressed in scales that measured the quality of friendships made on campus. Both formal and informal ties within peer network school social capital are discussed below in how they contribute towards persistence.

The number of clubs a student was involved with did not contribute significantly to predicting intent to persist. Social club involvement as an indicator of Tinto's (1993; 2012) social integration is well supported by research as likely influencing student persistence (Bean, 1983; Byun, Irvin et al., 2012; DeBard & Sacks, 2010; Fischer, 2007) and this thesis does not directly support those findings. However, informal peer ties, or peer interactions were significant predictors of intent to persist which still speaks to the importance of students having friends on campus that may be found in social clubs. Essentially, the results of this analysis show that there is not a direct benefit from being involved in many social clubs, but there is a benefit to having peer interactions. Perhaps if students are simply dedicated to one social club on campus rather than multiple, they will still receive the potentially positive influence of peer social networks.

From a social capital lens, Greek clubs on campus (e.g., fraternities and sororities), may provide positive peer networks that help students persist to graduation, which supports DeBard

and Sacks' (2010) findings. Additionally, the connection between Greek clubs and creating social norms was further exemplified by the qualitative data gathered as respondents noted how fraternities helped establish study times and social norms for academic performance. Social clubs can also create social norms of academic success and influence the behavior of students involved with a given social club (Wohn et al., 2013), extending beyond sororities and fraternities to any social club a student may be involved with on campus. In this sense, peer pressure toward academic work may be a positive influence on students who are involved with multiple social clubs on campus. With support from both the qualitative and quantitative data, exploring this phenomenon further is warranted, specifically if the number of social clubs a student is involved with has a positive effect on their intentions to persist to graduation or if the same benefits can be received from one dedicated group of peers.

For authority relationships, this study further supports the vast amount of literature noting the importance of faculty interactions with students (Endo & Harpel, 1982; Gist-Mackey et al., 2018; Hurtado et al., 2011; Kuh & Hu, 2001; Pascarella & Terenzini, 2005; Tinto, 1993; 2012). Given the importance of these interactions happening as soon as possible in a college student's journey (Ganss, 2016), this study focused on a sample of respondents in their first year of college. The results of this study suggest good social capital with authority figures is forming nearly right away in college for the selected sample. Additionally, the importance of faculty relationships was highlighted in the qualitative data gathered in this study, as respondents noted how their advisors and professors were influential in providing both support and information about how college processes work.

Overall, this study found school social capital does predict the intent to persist. Specifically, relationships with faculty members and involvement in social clubs on campus



proved most important for students to perceive themselves as likely to graduate from college. Kuh (1995) explored the learning opportunities that come from out-of-class activities, which he popularly termed “the other curriculum” in the title of his journal article. In his study, students reported learning how college systems function through peers in their sororities and fraternities, from talking to faculty after class, and from connecting with people outside of their majors (Kuh, 1995). While this study did not measure knowledge accrued from relationships specifically, it did measure how relationships might influence behavior possibly from knowledge and norms accrued from social circles (e.g., social capital), further supporting the importance of gaining access to people both inside and outside of the classroom. Tinto’s (1993; 2012) academic integration may be important to pass college classes, but social integration is vital to student development and feelings of connectedness to their new, albeit temporary home.

Second, and perhaps more telling, are the two areas of social capital that did not significantly predict students’ intents to persist in college: family and community social capital. While family relationships may certainly help influence behaviors at college, in terms of persistence, recent relationships formed at college may be more influential. This suggests that any bad social capital from familial structures or lack of family income may not directly inhibit a student’s intentions to persist in college. Additionally, any negative sentiments from home communities toward college may also be overcome by positive interactions with peers and authority figures at college. To be clear, Coleman (1988) situated community social capital as staying within the community, i.e.: capital does not follow a person once they leave the community, instead, those social ties weaken. For the respondents of this study, they have likely left their home communities (except for visits) and may be experiencing a weakening of old

social ties to community members. And as Coleman (1988) posited, weak ties are less likely to influence an individual's behavior for good or bad.

While close community ties may inhibit students from applying to college (Byun, Meece, et al., 2012; Israel & Beaulieu, 2004a; Nelson, 2016), this study only focused on students that were already enrolled in college. However, past literature has situated community ties as possibly a negative aspect of social capital. For instance, tight-knit rural communities may discourage students from attending college (Nelson, 2016), but this study suggests once students make the decision to attend college, these social ties with potentially negative attitudes toward college may not affect a student once they arrive on campus.

In many ways, this study further supports the importance of the connection between academic and social integration (Tinto, 1993; 2012). While factors of family and community social capital did not predict a student's intent to persist, relationships with faculty and peers were the most important factors for students to see themselves reaching graduation. Put simply, students must integrate socially on campus to have the greatest chance at persisting in college.

### **Persisting Beyond the Rural/Nonrural Divide**

The results for this research question were surprising in terms of past literature. This analysis suggests that the rural students sampled had higher intentions to persist in college than did nonrural students, which supports previous findings from Byun, Irvin, et al., (2012). However, rural students are also likely to take more time to graduate than nonrural students (Byun, Irvin, et al., 2012) and had this analysis been longitudinal, perhaps these nuances could have been further discerned.

However, rural students are still underrepresented in college (Hu, 2003; USDA ERA, 2017), and this analysis did not address enrollments figures. Instead, this analysis merely shows

that for the rural students that made it to college, they believe they can succeed. These results could help explain data from the National Center for Education Statistics (2013) in which high schools in rural areas are report test scores at levels on par or above urban and suburban areas in academics. The rural students sampled in this study believe they can make it to college graduation, which could be a testament to their academic preparation in high school.

These results also suggest that in terms of college persistence, the rural/urban divide may be closing, but it may be to the detriment of rural communities. The rural brain phenomenon results from rural students earning a college degree and rarely returning to their rural home communities (Estes et al., 2016). For rural communities that prepare their students for college success, the results of this analysis could mean that those same students are prepared to leave their home community for good.

### **The Value of Peers and Authority Figures**

There was only one area of school social capital that showed a significant difference between rural and nonrural students: authority relationships. The results suggest rural and nonrural students form peer relationships and are involved in social clubs on campus in comparable rates. However, the results were only trending toward significance ( $p < .10$ ) in the difference between rural and nonrural students in the formation of authority relationships.

Rural students reported closer relationships with authority figures than nonrural students. Hlinka (2017) noted the importance of instructors communicating reassurance to rural students who may be struggling to balance family social ties and distance from home with their school obligations. The results of this analysis suggest rural students perceive their instructors at the selected university as supportive and are actively seeking out these interactions.

However, this means there may have been accessibility barriers perceived by nonrural students that discouraged them from interacting with faculty members, or nonrural students simply were not interested in forming relationships with authority figures. Instructors should continue to encourage students to ask or answer questions during classes as this act has shown to decrease student intimidation of their teachers (Hurtado et al., 2011). Once students begin talking in front of their professors, they are more likely to stay after class to ask questions and begin forming bonds with faculty members that can help facilitate school social capital formation (Hurtado et al., 2011). If students fail to interact with faculty or vice versa, they may be devoting time to other areas of school social capital (Kuh and Hu, 2001). For instance, if students devoted less time to forming relationships with faculty, they were likely spending more time developing relationships with peers through student organizations and social clubs (Kuh & Hu, 2001). This could indicate nonrural students are prioritizing forming social ties with peers over authorities at college until they are more comfortable seeking out interactions with faculty members. However, given the influence that positive faculty relationships can have on a student's educational outcomes, future research should continue to explore why there is a rural/nonrural divide in forming relationships with authority figures at college.

### **Family Support: Income, Siblings and Communication**

There were two areas with statistical significance in the difference between rural and nonrural students' family social capital: family income and siblings attending college. Interestingly, there were no statistical differences between rural and nonrural students concerning mother and father's education levels and family processes. This suggests not only are rural and nonrural college students both coming from families with experience in higher education, but these families also talk supportively about college with their children. Despite the many

similarities between rural and nonrural family social capital, differences in family income and siblings' education warrant discussion.

First, nonrural students are more likely to come from families with higher incomes than rural students. Despite similar parent education levels, this suggests more urban areas employ college educated individuals with higher incomes than rural areas. It is important to note here there was no clear significance on how family income correlates to a student's likelihood of persistence, so the differences in family incomes for rural and nonrural students may not be of great importance to their attainment of a college degree.

Byun, Irvin et al., (2012) found rural students are more likely than urban and suburban students to come from families with annual incomes lower than \$25,000. However, even with the differences in family incomes between rural and nonrural students, most respondents in this study overwhelmingly reported family incomes above the \$50,000 range ( $n = 74$ ) and most of the respondents reported incomes above the \$25,000 range ( $n = 90$ ), so Byun, Irvin et al.'s, (2012) results may not have applied specifically to this data set. Given Byun, Irvin, et al.'s (2012) data set ranged in the thousands, and this data set consisted of 101 respondents, the differences in results for this study could easily have been due to the lack of generalizability of results.

Second, the results of this study suggest rural students were more likely to have had siblings attend college than nonrural students. Interestingly, these differences did not hold the same statistical significance for when siblings completed college, the differences were in whether siblings attended college or not. It is important to note only half of the respondents reported having siblings attend college, so the sample size for these differences was considerably smaller than the overall sample. Given past scholarship's attention to the dissemination of information from older siblings to younger siblings (Gillies & Lucey, 2006), the results of this

study may indicate siblings took on a form of peer social ties for the respondents. If rural students are moving far from their home communities to attend college and are now in a more urban environment than they are used to, older siblings could be helping younger siblings get established in their new college environment.

Overall, only two areas of family social capital were different on average for rural and nonrural students: family income and having siblings attend college. While nonrural students were more likely to come from families with high annual incomes, the results of this study did not place rural students at a disadvantage when it comes to likelihood of persistence in college, as the majority of respondents were well above Byun, Irvin et al.'s (2012) benchmark of \$25,000 annual income. Rural students were also more likely to have sibling attend college before them which could be an advantage to accessing information that may be helpful in navigating college.

## **Questioning Community**

Community social capital showed statistically significant differences between rural and nonrural students in community in support for higher education in terms of community processes. Specifically, rural students perceived less support of a college education than did nonrural students from their home communities. The differences between rural and nonrural students in community structural elements, including travel time from home to college, community organization involvement, and encouragement from high school guidance counselors, favorite teacher and peers were insignificant. However, given the importance of school social capital for students' intentions to persist, negative community social capital for rural students may be a disadvantage that can be overcome by forming strong ties with peers and authorities on campus.

The items for the community social capital processes were directed towards measuring both support of community members toward higher education and the necessity of a college degree to live in one's home community. These results showed nonrural students perceived both community support of higher education and the need to have a college degree to return to their home communities as more important than rural students. Given Coleman's (1988) explanation of intergenerational closure, or the overlapping of many social ties in small communities, these results are not surprising in that they suggest close community ties show support toward members leaving the community. However, close-knit communities have been shown to have positive effects on a student's aspirations toward applying to college (King, 2012). Herein lies an interesting intersection of community social capital. The more social ties overlap within a community, the more closely dictated are social norms and the more individuals may have to forgo their own self-interests to act in the interest of the collectivity (Coleman, 1988). But leaving the community for college is inherently an act of self-interest as these social ties will weaken with distance (Coleman, 1988). Research has shown students from rural communities may restrict their choice of college due to distance from home (Israel & Beaulieu, 2004a; Nelson, 2016), so perhaps the results of this study show the negative side of leaving a close-knit community behind. Rural students may perceive negative attitudes toward higher education from their community members because they have essentially acted in their own self-interest by moving away from home.

The differences in community social capital between rural and nonrural students could explain why rural students were more likely to form stronger relationships with authority figures at college, and subsequently may positively influence rural students' intentions to persist. Perhaps the weakening of old community social ties creates a need for new social ties in their

new college community. Nonrural students may not have perceived the same weakening of community social ties as did rural students, and therefore may not have had the same need to create new social ties in the college community.



## Chapter 6 - Conclusion

This chapter discusses both the theoretical and practical implications of this research as well as limitations and suggestions for future research. There are two major theoretical implications to consider from this study: development of measures for community social capital and the value of a *relational* approach to understanding the intent to persistence. First, though Putnam (2001) discussed community social capital trends from a macro societal lens, scholarship is still lacking in how to measure community social capital from a micro social network approach (i.e., framed within Coleman's (1988) conceptualization of social capital). While there still is no consensus in communication studies about how to measure social capital, this study aligned itself with Coleman's (1988) framework by analyzing individual social networks to understand social capital on a micro level. School and family social capital measures had the clearest direction based on past literature (Byun, Meece et al., 2012), and both areas showed significant or approaching significant results for correlations with the intention to persist in this study.

Measuring the social capital found within an individual's home community has remained a complicated area to analyze. Coleman's (1988) text explains close social ties may spur an individual to action, but they may also restrict an individual's actions through social norms. Given the potential for small, rural communities to have close social ties that both support youth and discourage members from leaving the community (Adedokin & Balschweid, 2008), there should be exploration into how a community can both help or hinder rural student success in college. However, contemporary literature following Coleman's (1988) framework has not reached a consensus on how to frame and quantitatively measure community social capital (Byun, Meece et al., 2012). Generally, the importance of community social capital in educational

outcomes has been drawn from qualitative studies (e.g., Gist-Mackey et al., 2018; Howley, 2006; Nelson, 2016). The community social capital measures used in this study relied on a combination of family social capital measures and themes from qualitative research, and the results were not significant. Themes from qualitative research should continue to be applied to quantitative research until community social capital scales that measure how individual social ties within a community can help or hinder educational outcomes for youth are formed.

Second, this study helped to conceptualize the likelihood of college persistence in terms of the value of relationships. Persistence scholars have long noted the importance of social capital using Bourdieu's (1986) and Coleman's (1988) individual social network approach (Pascarella & Terenzini, 2005; Tinto, 1993; 2012). But persistence scholarship has generally noted social capital as a concept, or as a check box, something that a student has or doesn't have, rather than a theoretical frame to understand persistence (Tinto, 2012), with few exceptions (e.g., Padgett, Johnson, & Pascarella, 2012). This study contributed a theoretical lens to social capital persistence literature in which specific areas of an individual's social capital was dissected and analyzed to reach general conclusions about which relationships are beneficial or restrictive to a student's likelihood of persistence. Viewing social capital through a theoretical lens rather than a conceptual framework allows for a wider range of relational influence on an individual's actions to be measured and discussed. Additionally, Tinto's (2012) social integration theory remains integral to persistence literature. As the results of this study suggested, socially integrating into the college environment by way of forming relationships with peers and authority figures had a generally stronger effect on students' intentions to persist in college than did older relationships from family and community members.

It must also be noted this study relied on respondents' perceptions of their relationships. Gehlbach (2015) noted the importance of opinion-based survey data in reflecting on student performance, teaching, schools, and policy decisions. Specifically, opinion-based data may provide useful feedback for institutional structures that have a stake in student success, in this case, the university, FYSs, instructors and communication studies departments. However, there is certainly a need to keep exploring social capital's influence on a student's likelihood of persistence outside of opinion-based data. Grade point averages, class attendance, and longitudinal graduation rates from an objective data pool may all contribute to a greater understanding of an individual's social capital effects.

The practical implications for this study lie in actions universities and instructors can take to continue investment in college student experiences and relationship forming. Given the importance of both academic and social integration in a student's likelihood of persistence (Tinto, 1975; 1993; 2012), universities must translate these academic buzzwords into cohesive institutional actions. Tinto (2012) explains one downfall universities fall into is continuous attempts to help students integrate socially into campus life, but these efforts are uncoordinated. FYSs and learning communities need to be in contact with other university programs interested in student persistence (e.g., academic advisors, Greek life faculty sponsors, enrollment offices...etc.). The results of this study showed students were unaware they were involved in either an FYS or learning community (i.e., this is discussed further in the limitations section). Conversations about the goals for each organization interested in student persistence need to happen among the leaders of each organization to facilitate a cohesive strategy for student persistence.

Additionally, universities must maintain assessment of their student persistence in terms of student communication with faculty and peers. While surveys, like this study, can create the type of data an institution needs to begin assessing persistence pitfalls at a localized level, Tinto (2012) explained they should not be a one-time affair. Thus, institutions must maintain assessment as part of an on-going process to understand the complexities surrounding student persistence (Tinto, 2012). Surveys are merely the first step in creating a larger data set that aims at understanding student persistence (Tinto, 2012). The next step for universities, according to Tinto (2012) is to analyze student transcripts to pinpoint exact areas of academic integration that can be improved by giving those areas attention to social integration.

Social clubs will continue to be a key area for peer interactions to occur in college. However, as this analysis demonstrated, the benefits of being involved in multiple social clubs may not be as important as dedicated involvement in a single social club. Faculty advisors of social clubs have a unique opportunity to connect with students outside the classroom, and these opportunities can help reduce accessibility barriers. This is a chance for faculty advisors to positively communicate with a student in an environment that is informal.

For their part, instructors can help reduce accessibility barriers that keep students from forming relationships with them. This study showed authority relationships helps predict students' intents to persist, although rural students perceived stronger relationships with faculty members than did nonrural students. Past research has illustrated how students may be intimidated by their instructors (Hurtado et al., 2011; Kuh & Hu, 2001). To reduce the reluctance of students, particularly nonrural students, to talk to their teachers, instructors can make the first move. For instance, Tinto (2012) notes how assessment of student work (e.g., papers and tests) provide an opportunity for instructors to invite students to have a conversation with them.

Additionally, instructors can create a more conversation friendly classroom to promote open communication between students and teachers. More class discussions when possible instead of lecture heavy classes may be key to reducing accessibility barriers. These two acts may be perceived by students as encouraging and supportive actions by instructors, both of which may influence students' perceptions of their ability to succeed (Tinto, 2012). And these invitations to communicate must happen frequently to establish trust in the student/faculty relationship (Endo & Harpel, 1982). Essentially, students need to know instructors are interested in their work and ultimately, their success as a student.

## **Limitations**

There were several limitations to this study that should be addressed. First, the sample in this study was disproportionately white students ( $n = 81$ ) with a few respondents identifying as Hispanic ( $n = 8$ ), African American ( $n = 3$ ), Asian ( $n = 1$ ), Native American ( $n = 1$ ) and biracial ( $n = 7$ ), however, there were not enough responses to generalize results based on race and ethnicity. While these demographics may be a factor of where the study took place (i.e., a predominantly white institution, PWI) past scholarship has noted how relationship forming may differ depending on racial identity (Brooks, 2015; Guiffrida, 2005; Sinanan, 2012). While scholarship generally supports the same needs for persistence in college for white, African American, Asian and Hispanic students (e.g., social integration into peer networks on campus, familial support, interactions with faculty members) (Brooks, 2015; Guiffrida, 2005) scholarship also shows minority students on a predominately white campus may struggle to form the social ties to help with social integration, especially if there are few nonwhite instructors (Sinanan, 2012). Sinanan's (2012) study focusing on African American males' experiences at a PWI noted students wanted to interact with white faculty members but "they did not want to surrender their

sense of academic confidence, racial identity, or cultural comfort” to form these relationships (p. 5). This reluctance to reach out to faculty members could have a significant effect on the formation of school social capital for minorities at a PWI.

Along with sample demographics, this study did not have enough responses to reliably run statistical tests discerning first and continuing generation students. There is a possibility that the rural and first-generation could have been conflated without the distinction clearly displayed. However, given that the results for RQ2 showed that rural students had higher intentions to persist in college than nonrural students, the unintentional conflation between rural and first-generation may not have affected the results of this study in a serious manner.

Second, past literature has noted the importance of FYSs and learning communities in helping to facilitate both peer and authority relationships early in a college student’s career (Friedman & Alexander, 2007, Goodman & Pascarella, 2006; Pascarella & Terenzini, 2005). While this survey was sent specifically to students both involved and not involved in an FYS and by extension learning communities for first-year students, there were mixed responses on the two items asking if the respondent was a part of either or both communities (i.e., to be involved with a learning community at this selected campus, a student is automatically a part of the overall first-year seminar but did not report so). These responses could indicate students were unaware they were taking part in an FYS and learning community, and by extension unaware of these formal tie peer networks on campus. It is well documented that involvement in FYSs and learning communities increase a student’s willingness to participate in class discussions and communicate with classroom peers and instructors (Friedman & Alexander, 2007; Goodman & Pascarella, 2006). It is less clear based on past research if a student must be aware of their involvement in FYSs and learning communities to utilize these benefits.

Third, there were limitations with some of the measures used in this study. Specifically, as noted above, community social capital measures would have benefitted from one cohesive scale rather than several individual items. At the very least, these individual items should have all been measured with 5-point Likert type scales instead of the varying ranges that were utilized. Scholars in communication studies have also refined a measurement for family communication patterns that has shown to help further categorize the types of verbal and nonverbal communication between parents and children (e.g., Orrego & Rodriguez, 2001). If this study had utilized the Revised Family Communication Processes instrument modified by Ritchie and Fitzpatrick (1990), family communication may have provided a better cue as to the support or lack thereof for college communicated between parents and children. Finally, originally the distance from home the student's university was included in the survey to cross check student's self-reported type of home county (metro/nonmetro). However, unforeseen difficulties with Qualtrics created unreliable responses. Subsequently, this measure was dropped from the study. While the final results were not significantly impacted by dropping this measure, this study would have benefitted from an additional cross-check of student self-reports of their type of home county. Along with the self-report discrepancies, this study used the terminology "rural and nonrural" to denote the rural/urban divide. However, this divide was measured using the terminology "metro and nonmetro" which could be unintentionally misleading for respondents.

Last, this study did not account for computer-mediated communication (CMC) as a means for students to gain information. Scholarship has shown the growing trend of college students turning to social networking sites (SNS) to fill information gaps via peer interactions (Aubrey & Rill, 2013; Ellison et al., 2007; Gist-Mackey et al., 2018). For instance, Facebook has been shown to facilitate weak tie relationships for undergraduates seeking information about

college processes and support from their social networks (Aubrey & Rill, 2013). Twitter has also been shown to have practical applications like keeping up with assignment deadlines via peer interactions (Gist-Mackey et al., 2018). It is possible the students in this study who did not report strong relationships with faculty were simply seeking information and support online from peer networks. Additionally, CMC has increased the flow of information from schools to students (Gist-Mackey et al., 2018). For instance, for first-generation college students, Gist-Mackey et al. (2018) found “university e-mails and websites, Google searches, and College Board” (p. 7) were all important sources of information for students who did not have offline social capital networks to rely on. It is entirely possible the respondents in this study utilized CMC to access information and support to help in their education which may have influenced responses.

## **Future Directions**

There are several areas based on this study where future research should focus, including, racial inequalities in the formation of social capital, continuing versus first generation students, the relationship between CMC and social capital, authority relationships as a means to influence positive student behavior, highly mobile families in high school, the influence of siblings as potential for both positive and negative social capital and nonrural student school social capital.

First, while some research has noted the differences in school social capital between racial identities given the institution type (e.g., predominantly white institutions versus historically black colleges and universities) (Brooks, 2015; Guiffida, 2005; Sinanan, 2012) this study calls for further examination of relationships formed on campus between minority students and their instructors and peers. Byun et al. (2017) offer an explanation for discrepancies in college persistence dependent on race; non-white students may experience different parent and teacher expectations about educational outcomes than do white students from rural communities



(Byun et al., 2017). Given the importance of school social capital on a student's likelihood to persist, quantitative studies should work to create sample sizes large enough to explore differences in relationship forming between minority students and nonminority instructors and peers at predominantly white institutions.

Second, first and continuing generation student differences should be further explored. The sample in this study did not have enough first-generation respondents to make generalizable claims about the differences between first and continuing generation students' social capital formation. While past scholarship has worked to inform these differences, special attention should be given to how school social capital is formed. For instance, in Moschetti and Hudley's (2014) qualitative research, parents of first-generation students were not aware of campus resources available to help their children. These parents still played a supportive role in their students' education; however, the support was focused on encouraging the student's internal ability to overcome whatever problem they were facing, rather than advising them to reach out to resources offered by the university (Moschetti & Hudley, 2014). Additionally, Byun, Irvin et al.'s (2012) study found the lines between first generation status and lack of financial support seemed to be blurred, meaning financial backing was often lacking for first generation students. If first generation students are both unaware of campus resources for guidance and must work additional jobs to pay for college, the available time these students have to form relationships with peers and authority figures on campus, the most beneficial form of social capital in terms of persistence, may be limited.

Third, future research should continue to explore the relationships between CMC and social capital. Specifically, this research should focus on how technology may help in the formation of school social capital (e.g., peer networks and authority relationships). Given the

influence school social capital has on a student's intent to persist in college as shown in this analysis, there should be special focus given to how college peers communicate online to create peer social capital. Peer communities created online through social media platforms should also be explored as disseminators of information to new college students and subsequently the formation of online social capital. Additionally, as Gist-Mackey et al. (2018) found students may be utilizing CMC as a means to gain information, research should explore whether CMC may detract from in person relationships.

Fourth, new theoretical approaches should be given this study's findings that strong school social capital within college may be able to surpass any negative social capital from family and community social ties, the formation of school social capital should be further explored in scholarship with new theoretical lenses. For instance, Rocklage, Pietri, and Fazio (2017) have begun to explore positive and negative language use as an indicator to how many peer relationships may form. Coupling communication studies theories with social capital might also offer an additional research route academic persistence. Roland, Frenay, and Boudrenghien (2016) used the theory of planned behavior to better understand the behavioral norms of persistence. Attention should be given to research that indicates how these school relationships are formed and what barriers may prevent peer and authority relationships from occurring in college.

Fifth, past scholarship has noted students in families that move often may not have access to beneficial community social capital in ways that students in static families do (Adedokin & Balschweid, 2008; Coleman, 1988; Kwon, Heflin & Ruef, 2013). Mobile families continuously break or weaken old social ties (Adedokin & Balschweid, 2008; Coleman, 1988; Kwon et al., 2013). Kwon et al. (2013) found families that recently relocated to a new community struggled

to quickly earn the trust of old community members which delayed their access to the new community's social capital. Mobile families may exist on the margins of their new community and struggle to integrate (Kwon et al., 2013). Israel and Beaulieu (2004a) show students who come from highly mobile families are more likely to drop out of high school, or not attend college than those students from residence stable families. The longer a student stays in one home while in secondary school and has more chances to integrate into community social networks, the higher their educational aspirations and likelihood to complete high school and begin college (Israel & Beaulieu, 2004a). Future research should shift attention to the impact that mobility in high school can affect relationship forming while at college.

Sixth, this study's findings that rural students perceive stronger importance than nonrural students in having an older sibling attend college could speak to an important factor in family social capital: birth order. Future research should explore how older siblings may become more like peer groups for younger siblings. Gillies and Lucey (2006) found older siblings can provide cultural capital to younger siblings that may help them acclimate to new educational environments. It is possible the same amount of information about how to navigate college available to younger siblings would not be available to the oldest sibling. Older siblings completing college could also create a norm for college success within a family unit. Coleman (1988) explains the closer the social ties are, the more likely social norms are to be created and followed by social networks. Once a legacy of college education has begun, perhaps that becomes the new standard for younger family members.

Last, this study revealed discrepancies between rural and nonrural students in the formation of school social capital. Specifically, nonrural students were less likely to perceive their relationships with faculty members as strong ties compared to rural students. While

literature does discuss differences in school social capital between rural and nonrural students (e.g., Israel & Beaulieu, 2004b), the scholarship focus thus far has been on students in high school. It could be assumed the size of home communities does not affect a student once they move to college, but this study suggests home community sizes may still affect how relationships are formed with faculty members. Future research should continue to explore the differences between students from rural and nonrural areas, specifically in the formation of relationships with faculty members at college.

In conclusion, this thesis demonstrates the importance of first-year college students forming new relationships on campus, namely with their authority figures and peers. In particular, this thesis showed how communication and relational forming at college can influence a student's perception of their intent to persist. It would follow then that Tinto's (2012) social integration should remain at the forefront of university strategic planning when thinking through both student persistence and retention. The nuances of these integral relationships at college remain an important area for future scholars to investigate as should further research into the rural/urban divide in college student demographics. Most notably, the relationships with which a student enters college do not appear to solely define their academic outcomes, but rather the relationships a student forms once at college appear to play an integral role in modeling the type of academic success they pursue.

## References

- Adedokin, O. A., & Balschweid, M. A. (2008). Community social interactive processes and rural adolescents' educational outcomes: What we know and what we need to know. *Rural Adolescents' Educational Outcomes*, 3(2), 1-19. doi:10.4148/ojrrp.v3i2.40
- Aubrey, J. S., & Rill, L. (2013). Investigating relations between Facebook use and social capital among college undergraduates. *Communication Quarterly*, 61, 479-496.  
doi:10.1080/01463373.2013.801869
- Augustine, J. M. (2014). Maternal education and the unequal significance of family structure for children's early achievement. *Social Forces*, 93, 687-718. doi: 10.1093/sf/sou072\_
- Baum, S., Ma, J., & Payea, K. (2013). *Education pays: The benefits of higher education for individuals and society. Trends in Higher Education Series*. 1-48. Retrieved from:  
<https://trends.collegeboard.org/sites/default/files/education-pays-2013-full-report.pdf>
- Bean, J. P. (1983). The application of a model of turnover in work organizations to the student attrition process. *Review of Higher Education*, 6, 129-148. doi: 10.1353/rhe.1983.0026\_
- Beasley, S. E. (2011). *Country roads take me...?: An ethnographic case study of college pathways among rural, first-generation students*. (Doctoral Dissertation). Retrieved from  
<http://hdl.handle.net/2345/1827>.
- Benoit, W. L., & Holbert, R. L. (2008). Empirical intersections in communication research: Replication, multiple quantitative methods, and bridging the quantitative-qualitative divide. *Journal of Communication*, 58, 615-628. doi: 10.1111/j.1460-2466.2008.00404.x

- Bitz, A. L. (2011). *Does being rural matter?: The roles of rurality, social support, and social self-efficacy in first-year college student adjustment*. (Doctoral Dissertation). Retrieved from <http://digitalcommons.unl.edu/cehsdiss>
- Bourdieu, P. (1986). The forms of capital. In J. G. Richardson (Ed.), *Handbook of theory of research for the sociology of education* (pp. 46-58). Westport, CT: Greenwood Press.
- Brooks, J. (2015). The impact of family structure, relationships, and support on African American students' collegiate experiences. *Journal of Black Studies*, 46, 817-836. doi:10.1177/0021934715609914
- Byun, S., Irvin, M. J., & Meece, J. L. (2012). Predictors of bachelor's degree completion among rural students at four-year institutions. *The Review of Higher Education*, 35, 463-484. doi:10.1353/rhe.2012.0023
- Byun, S., Irvin, M. J., & Meece, J. L. (2015). Rural-nonrural difference in college attendance patterns. *Peabody Journal of Education*, 90, 263-279. doi:10.1080/0161956x.2015.1022384
- Byun, S., Meece, J. L., & Agger, C. A. (2017). Predictors of college attendance patterns of rural youth. *Research in Higher Education*, 58, 817-842. doi:10.1007/s11162-017-9440-z
- Byun, S., Meece, J. L., Irvin, M. J., & Hutchins, B. C. (2012). The role of social capital in educational aspirations of rural youth\*. *Rural Sociology*, 77, 355-379. doi:10.1111/j.1549-0831.2012.00086.x
- Chen, R., & St. John, E. (2011). State financial policies and college student persistence: A national study. *The Journal of Higher Education*, 82, 629-660. doi:10.1080/00221546.2011.11777220

- Coleman, J. S. (1988). Social capital in the creation of human capital. *American Journal of Sociology*, 94, 17-41.
- DeBard, R., & Sacks, C. (2010). Fraternity/sorority membership: Good news about first-year impact. *Oracle: The Research Journal of the Association of Fraternity/Sorority Advisors*, 5(1), 12-23.
- Duggan, M. B. (2004). E-mail as social capital and its impact on first-year persistence of 4-year college students. *Journal of College Student Retention: Research, Theory & Practice*, 6, 169-189. doi: 10.2190/Y9FV-GE86-8JXA-FDVH
- Endo, J. J., & Harpel, R. L. (1982). The effect of student-faculty interaction on students' educational outcomes. *Research in Higher Education*, 16, 115-138. doi: 10.1007/bf00973505
- Elkins, S. A., Braxton, J. M., & James, G. W. (2000). Tinto's separation stage and its influence on first-semester college student persistence. *Research in Higher Education*, 41, 251-268. doi:10.1023/A:1007099306216
- Ellison, N. B., Steinfield, C., & Lampe, C. (2007). The benefits of Facebook "friends:" Social capital and college students' use of online social network sites. *Journal of Computer-Mediated Communication*, 12, 1143-1168. doi:10.1111/j.1083-6101.2007.00367.x
- Estes, H. K., Estes, S., Johnson, D. M., Edgar, L. D., & Shoulders, C. W. (2016). The rural brain-drain and choice of major: Evidence from one land grant university. *NACTA Journal*, 60(1), 9-13.
- Fischer, M. J. (2007). Settling into campus life: Differences by race/ethnicity in college involvement and outcomes. *The Journal of Higher Education*, 78, 125-161. doi:10.1080/00221546.2007.11780871.

- Freistadt, J., & Strohschein, L. (2012). Family structure differences in family functioning: Interactive effects of social capital and family structure. *Journal of Family Issues*, 34, 952-974. doi:10.1177/0192513X12447054
- Friedman, D. B., & Alexander, J. S. (2007). Investigating a first-year seminar as an anchor course in learning communities. *Journal of The First-Year Experience & Students in Transition*, 19, 63-74.
- Ganss, K. M. (2016). The College Transition for First-Year Students from Rural Oregon Communities. *Journal of Student Affairs Research and Practice*, 53, 269-280. doi:10.1080/19496591.2016.1157487
- Gehlbach, H. (2015). Seven Survey Sins. *Journal of Early Adolescence*, 35, 883-897. doi:10.1177/0272431615578276
- Gillies, V., & Lucey, H. (2006). 'It's a connection you can't get away from': Brothers, sisters and social capital. *Journal of Youth Studies*, 9, 479-493. doi:10.1080/13676260600914549
- Gist-Mackey, A. N., Wiley, M. L., & Erba, J. (2018). "You're doing great. Keep doing what you're doing": Socially supportive communication during first-generation college students' socialization. *Communication Education*, 67, 52-72. doi:10.1080/03634523.2017.1390590
- Goodman, K., & Pascarella, E. T. (2006). First-year seminars increase persistence and retention: A summary of the evidence from How College Affects Students. *Peer Review*, 8(3), 26-28.



- Gross, J. P. K., Hossler, D., & Ziskin, M. (2007). Institutional aid and student persistence: An analysis of the effects of institutional financial aid at public four-year institutions. *NASFAA Journal of Student Financial Aid*, 37(1), 28-39.
- Guiffrida, D. (2005). To break away or strengthen ties to home: A complex issue for African American college students attending a predominantly white institution. *Equity & Excellence in Education*, 38(1), 49-60. doi:10.1080/10665680590907864
- Hausmann, L. R. M., Schofield, J. W., & Woods, R. L. (2007) Sense of belonging as a predictor of intentions to persist among African American and white first-year college students. *Research in Higher Education*, 48, 803-839. doi:10.1007/s11162-007-9052-9
- Hlinka, K. R. (2017). Tailoring retention theories to meet the needs of rural Appalachian community college students. *Community College Review*, 45, 144-164. doi:10.1525/sop.2007.50.1.27
- Howley, C. W. (2006). Remote possibilities: Rural children's educational aspirations. *Peabody Journal of Education*, 81(2), 62-80. doi:10.1207/s15327930pje8102\_4
- Hu, S. (2003). Educational aspirations and postsecondary access and choice: Students in urban, suburban, and rural schools compared. *Education Policy Analysis Archives*, 11(4), 1-13.
- Hurtado, S., Eagan, M. K., Tran, M. C., Newman, C. B., Chang, M. J., & Velasco, P. (2011). "We do science here": Underrepresented students' interactions with faculty in difference college contexts. *Journal of Social Issues*, 67, 553-579. doi:10.1111/j.1540-4560.2011.01714.x
- Israel, G. D., & Beaulieu, L. J. (2004a). Investing in communities: Social capitals role in keeping youth in school. *Journal of Community Development*, 34(2), 35-57. doi:10.1080/15575330409490111

- Israel, G. D., & Beaulieu, L. J. (2004b). Laying the foundation for employment: The role of social capital in educational achievement. *The Review of Regional Studies*, 34, 260-287.
- Jamieson, L. (2000). Migration, place and class: Youth in a rural area. *The Sociological Review*, 48, 203-223. doi:10.1111/1467-954x.00212
- Jehangir, R. (2010). Stories as knowledge: Bringing the lived experience of first-generation college students into the academy. *Urban Education*, 45, 533-553.  
doi:10.1177/0042085910372352
- Kansas State University, Office of the Registrar. (2017). *Enrollment summary by college*. Retrieved from <https://www.k-state.edu/registrar/statistics/colleges.html>
- Kao, G., & Rutherford, L. T. (2007). Does social capital still matter? Immigrant minority disadvantage in school-specific social capital and its effects on academic achievement. *Sociological Perspectives*, 50(1), 27-52. doi:10.1525/sop.2007.50.1.27
- Kern, M. (1997). Social capital and citizen interpretation of political ads, news, and web site information in the 1996 presidential election. *American Behavioral Scientist*, 40, 1238-1249. doi:10.1177/0002764297040008020
- Kikuchi, M., & Coleman, C. L. (2012). Explicating and measuring social relationships in social capital research. *Communication Theory*, 22, 187-203. doi:10.1111/j.1468-2885.2012.01401.x
- King, S. B. (2012). Increasing college-going rate, parent involvement, and community participation in rural communities. *Rural Educator*, 33(2), 20-26.
- Kuh, G. D. (1995). The other curriculum: Out-of-class experiences associated with student learning and personal development. *Journal of Higher Education*, 66, 123-155.

- Kuh, G. D., & Hu, S. (2001). The effects of student-faculty interaction in the 1990s. *The Review of Higher Education*, 24, 309-332. doi:10.1353/rhe.2001.0005
- Kwon, S. W., Heflin, C., & Ruef, M. (2013). Community social capital and entrepreneurship. *American Sociological Review*, 78, 980-1008. doi:10.1177/0003122413506440
- Lee, C. J., & Sohn, D. (2016). Mapping the social capital research in communication: A bibliometric analysis. *Journalism & Mass Communication Quarterly*, 93, 728-749. doi:10.1177/1077699015610074
- Lohfink, M. M., & Paulsen, M. B. (2005). Comparing the determinants of persistence for first-generation and continuing generation students. *Journal of College Student Development*, 46, 409-428. doi:10.1353/csd.2005.0040
- Methany, J., & McWhirther, E. H. (2013). Contributions of social status and family support to college students' career decision self-efficacy and outcome expectations. *Journal of Career Assessment*, 21, 378-394. doi:10.1177/1069072712475164
- Moschetti, R. V., & Hudley, C. (2014). Social capital and academic motivation among first-generation community college students. *Community College Journal of Research and Practice*, 39, 235-251. doi:10.1080/10668926.2013.819304
- Nam, Y., & Huan, J. (2009). Equal opportunity for all? Parental economic resources and children's educational achievement. *Child and Youth Services Review*, 31, 625-634. doi:10.1016/j.childyouth.2008.12.002
- Nelson, I. A. (2016). Rural student's social capital in the college search and application process. *Rural Sociology*, 81, 249-281. doi:10.1111/ruso.12095

- Orrego, V. O., & Rodriguez, J. (2001). Family communication patterns and college adjustment: The effects of communication and conflictual independence on college students. *Journal of Family Communication, 1*, 175-189.
- Padgett, R. D., Johnson, M. P., & Pascarella, E. T. (2012). First-generation undergraduate students and the impacts of the first year of college: Additional evidence. *Journal of College Student Development, 53*, 243-266. doi:10.1353/csd.2012.0032
- Pascarella, E. T., & Terenzini, P. T. (2005). *How college affects students: A third decade of research* (2nd ed., Vol. 2). San Francisco, CA: Jossey-Bass.
- Pompper, D. (2006). Toward a 'relationship-centered' approach to student retention in higher education. *Public Relations Quarterly, 51*(2), 29-36.
- Putnam, R. D. (2001). *Bowling alone: The collapse and revival of American community*. New York City, NY: Simon and Schuster.
- Reason, R. D. (2009). An examination of persistence research through the lens of a comprehensive conceptual framework. *Journal of College Student Development, 50*, 659-682. doi:10.1353/csd.0.0098
- Ritchie, L. D., & Fitzpatrick, M. A. (1990). Family communication patterns: Measuring intrapersonal perceptions of interpersonal relationships. *Communication Research, 17*, 523-544. doi: 10.1177/009365090017004007
- Rocklage, M. D., Pietri, E. S., & Fazio, R. H. (2017). The weighting of positive vs. negative valence and its impact on the formation of social relationships. *Journal of Experimental Social Psychology, 73*, 65-75. doi:10.1016/j.jesp.2017.06.011
- Rojas, H., Shah, D. V., & Friedland, L. A. (2011). A communicative approach to social capital. *Journal of Communication, 61*, 689-712. doi:10.1111/j.1460-2466.2011.01571.x

- Roland, N., Frenay, M., & Boudrenghien, G. (2016). Understanding academic persistence through the theory of planned behavior. *Journal of College Student Retention: Research, Theory & Practice*, 20(2), 215-235. Doi: 10.1177/1521025116656632
- Sandefur, G. D., Meier, A. M., & Campbell, M. E. (2006). Family resources, social capital, and college attendance. *Social Science Research*, 35, 525-553.  
doi:10.1016/j.ssresearch.2004.11.003
- Sherman, J., & Sage, R. (2011). Sending off all your good treasures: Rural schools, brain-drain, and community survival in the wake of economic collapse. *Journal of Research in Rural Education*, 26(11), 1-14.
- Sinanan, A. N. (2012). Still here: African American male perceptions of social and academic engagement at a 4-year, predominantly white institution of higher learning in Southern New Jersey. *Sage Open*, 2(2), 1-7. doi:10.1177/2158244012445212
- Somers, P., Woodhouse, S. R., & Cofer, J. E. (2004). Pushing the boulder uphill: The persistence of first-generation college students. *NASPA Journal*, 41, 418-435. doi:10.2202/0027-6014.1353
- Terenzini, P., & Pascarella, E. T. (1980). Student/faculty relationships and freshman year educational outcomes: A further investigation. *Journal of College Student Personnel*, 21, 521-528.
- Tieken, M. C. (2016). College talk and the rural economy: Shaping the educational aspirations of rural, first-generation students. *Peabody Journal of Education*, 91, 203-223. doi: 10.1080/0161956X.2016.1151741
- Tinto, V. (1975). Dropout from higher education: A theoretical synthesis of recent research. *Review of Educational Research*, 45(1), 89-125.

- Tinto, V. (1993). *Leaving college: Rethinking the causes and cures of student attrition* (2nd ed., Vol. 1). Chicago, IL: University of Chicago Press.
- Tinto, V. (1998). Colleges as communities: Taking research on student persistence seriously. *The Review of Higher Education*, 21, 167-177. Retrieved from <https://muse-jhu-edu.er.lib.k-state.edu/article/30046>
- Tinto, V. (2012). *Completing college: Rethinking institutional action* (1st ed., Vol. 1). Chicago, IL: University of Chicago Press.
- Tinto, V. (2017). Reflections on student persistence. *Student Success*, 8(2), 1-8.  
doi:10.5204/ssj.v8i2.376
- Tucker, S. A. (2010). *Into another kind of country: The college matriculation of youth from rural areas* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses database. (UMI No. 3429502)
- U.S. Department of Agriculture, Economic Research Service. (2017) *Rural education at a glance*. 171, 1-6. Retrieved from <https://www.ers.usda.gov/webdocs/publications/83078/eib-171.pdf?v=42830>
- U.S. Department of Education, National Center for Education Statistics. (2013). *The status of rural education*. Retrieved from [https://nces.ed.gov/programs/coe/indicator\\_tla.asp](https://nces.ed.gov/programs/coe/indicator_tla.asp)
- U.S. Department of Education, National Center for Education Statistics. (2015). *Rural education in America*. Retrieved from <https://nces.ed.gov/surveys/ruraled/tables/b.3.b.-1.asp>
- U.S. Department of Education, National Center for Education Statistics. (2017). *First-time postsecondary students' persistence after 3 years*. Retrieved from [https://nced.ed.gov/programs/coe/indicator\\_tsc.asp](https://nced.ed.gov/programs/coe/indicator_tsc.asp)

- Wang, T. R. (2014). "I'm the only person from where I'm from to go to college": Understanding the memorable messages first-generation college students receive from parents. *Journal of Family Communication*, 14, 270-290. doi:10.1080/15267431.2014.908195
- Wells, R. (2008). The effects of social and cultural capital on student persistence. *Community College Review*, 36(1), 25-46. doi:10.1177/0091552108319604
- Wohn, D. Y., Ellison, N. B., Khan, M. L., Fewins-Bliss, R., & Gray, R. (2013). The role of social media in shaping first-generation high school students college aspirations: A social capital lens. *Computers & Education*, 63, 424-436. doi:10.1016/j.compedu.2013.01.004

## **Appendix A - IRB Consent Form**

**PROJECT TITLE:** Relationships Matter: Social Capital Formed in the First Year of College

**APPROVAL DATE:** February 27, 2018      **EXPIRATION DATE:** February 27, 2019

**PRINCIPAL INVESTIGATOR:** Cassidy Stefka, Graduate Student, Communication Studies

**CO-INVESTIGATOR(S):** Dr. Natalie Pennington, Communication Studies, Dr. Han, Communication Studies, Dr. Paul, Communication Studies

**CONTACT NAME AND PHONE FOR ANY PROBLEMS/QUESTIONS:** Cassidy Stefka, [cassidystefka@ksu.edu](mailto:cassidystefka@ksu.edu), Dr. Natalie Pennington, [natpen@ksu.edu](mailto:natpen@ksu.edu)

**IRB CHAIR CONTACT/PHONE INFORMATION:** Rick Scheidt, Chair, Committee on Research Involving Human Subjects, 203 Fairchild Hall, Kansas State University, Manhattan, KS 66506, (785) 532-3224.

**PURPOSE OF THE RESEARCH:** This research is interested in how social capital can influence college students' experiences in the university setting during their first year on campus. Specifically, the data will help differentiate experiences among rural and nonrural students.

**PROCEDURES OR METHODS TO BE USED:** To be a participant in this study you will be asked to complete a survey about your perception of and experience with your own family support and support found on campus. To be a participant you must be at least 18 years old and in your first year of college at Kansas State University.

**LENGTH OF STUDY:** We expect that the survey will take 20-25 minutes to complete.

**RISKS OR DISCOMFORTS ANTICIPATED:** There are no known risks to participating in this research. You may cease participation if at any time if you find yourself uncomfortable.

**BENEFITS ANTICIPATED:** Results from this work may offer insights into difficulties experienced during your first year in college.

**EXTENT OF CONFIDENTIALITY:** Any identifying information provided will be maintained separate from data for analysis and kept on a password protected computer for the minimum of seven years per IRB standards and then destroyed.

**TERMS OF PARTICIPATION:** I understand this project is research, and that my participation is completely voluntary. I also understand that if I decide to participate in this study, I may withdraw my consent at any time, and stop participating at any time without explanation, penalty, or loss of benefits, or academic standing to which I may otherwise be entitled.

By clicking "yes" I provide consent for participation and verify that I am at least 18 years of age. **Yes No**



## Appendix B - Survey Measures

<b>Inclusion/Exclusion Criteria Questions</b>
---

Are you a freshman at KSU?

Yes

No

Sometimes students take breaks between high school and college, or they attend a community college for two years before attending a four-year institution. While these are valuable choices, this research is interested in studying and speaking with students who attend college immediately following their senior year of high school. Were you a senior in high school last year?

Yes

No

<b>Independent Variables</b>
------------------------------

### **Rural/Nonrural Variable**

How would you classify the county where your high school was located?

1 = Metro

2 = Nonmetro

### **Persistence Variable**

#### **Institutional and Goal Commitments PVDD Subscale**

1. It is important for me to graduate from college.
2. I am confident that I made the right decision in choosing to attend this university.
3. It is likely that I will register at this university next fall.
4. It is not important to me to graduate from this university. (\*)
5. I have no idea at all what I want to major in.
6. Getting good grades is not important to me. (\*)

\*indicates reserve coded items.

#### **Academic and Intellectual Development PVDD Subscale**

1. I am satisfied with the extent of my intellectual development since enrolling in this university.
2. My academic experience has had a positive influence on my intellectual growth and interest in ideas.
3. I am satisfied with my academic experience at this university.
4. Few of my courses this year have been intellectually stimulating. (\*)
5. My interest in ideas and intellectual matters has increased since coming to this university.
6. I am more likely to attend a cultural event (for example, a concert, lecture, or art show) now than I was before coming to this university.
7. I have performed academically as well as I anticipated I would.

\*indicates reserve coded items.

**How confident are you that you will receive a bachelor's degree?**

(1 = not at all confident, 5 = very confident)

<b>Dependent Variables</b>
----------------------------

**School Social Capital Peer Networks Variable**

**Peer-Group Interactions PVDD Subscale**

1. Since coming to this university I have developed close personal relationships with other students.
2. The student friendships I have developed at this university have been personally satisfying.
3. My interpersonal relationships with other students have had a positive influence on my personal growth, attitudes, and values.
4. My interpersonal relationships with other students have had a positive influence on my intellectual growth and interest in ideas.
5. It has been difficult for me to meet and make friends with other students. (\*)
6. Few of the students I know would be willing to listen to me and help me if I had a personal problem. (\*)
7. Most students at this university have values and attitudes different from my own.

\*indicates reserve coded items.

**How many clubs are you a part of at KSU: \_\_\_\_\_**

**School Social Capital Authority Relationships Variable**

**Interactions with Faculty PVDD Subscale**

1. My nonclassroom interactions with faculty have had a positive influence on my personal growth, values, and attitudes.
2. My nonclassroom interactions with faculty have had a positive influence on my intellectual growth and interest in ideas.
3. My nonclassroom interactions with faculty have had a positive influence on my career goals and aspirations.
4. Since coming to this university I have developed a close, personal relationship with at least one faculty member.
5. I am satisfied with the opportunities to meet and interact informally with faculty members.

**Faculty Concern for Student Development and Teaching PVDD Subscale**

1. Few of the faculty members I have had contact with are generally interested in students. (\*)
2. Few of the faculty members I have had contact with are generally outstanding or superior teachers. (\*)
3. Few of the faculty members I have had contact with are willing to spend time outside of class to discuss issues of interest and importance to students. (\*)
4. Most of the faculty I have had contact with are interested in helping students grow in more than just academic areas.

5. Most faculty members I have had contact with are genuinely interested in teaching.  
\*indicates reserve coded item

### **Trustworthy Information Academic Capital Subscale**

1. I am more trusting of information about my education that I receive from my college than of information about my education that I receive from my family.
2. I am more trusting of information about my education that I receive from my college than of information about my education that I receive from my friends.
3. I view people who work at my college as trustworthy sources of information.

### **Family Social Capital Structural Variables**

#### **What is the highest level of education for your mother?**

- 1 = Completed some high school
- 2 = High school graduate or equivalent
- 3 = Technical school degree
- 4 = Completed some college
- 5 = Associate degree
- 6 = Bachelor's degree
- 7 = Master's degree
- 8 = Ph.D., law degree, or medical degree

#### **What is the highest level of education for father?**

- 1 = Completed some high school
- 2 = High school graduate or equivalent
- 3 = Technical school degree
- 4 = Completed some college
- 5 = Associate degree
- 6 = Bachelor's degree
- 7 = Master's degree
- 8 = Ph.D., law degree, or medical degree

#### **What is the highest level of education for your step-parent?**

- 1 = Completed some high school
- 2 = High school graduate or equivalent
- 3 = Technical school degree
- 4 = Completed some college
- 5 = Associate degree
- 6 = Bachelor's degree
- 7 = Master's degree
- 8 = Ph.D., law degree, or medical degree

**How many siblings do you have? \_\_\_\_\_**

**Have any of your siblings gone to college?**

1 = No

2 = Yes

**Did they complete their degree?**

1 = No

2 = Yes

**What was your family's total income last year?**

1 = Less than \$15,000

2 = \$15,000-\$24,999

3 = \$25,000-\$49,999

4 = \$50,000-\$74,999

5 = \$75,000-\$99,999

6 = \$100,000 or more

### **Family Social Capital Processes Variable**

#### **Familial Expectations Academic Capital Subscale**

1. My family encouraged me to consider other paths in life than attending college. (\*)

2. My family expected me to pursue other paths in life than attending college. (\*)

\*indicates reserve coded items.

#### **Concern About Costs Academic Capital Subscale**

1. I can continue to attend my college without financial aid.

2. I am confident that I can financially afford to finish my college degree.

3. I am more focused on my college coursework than I am on my financial concerns.

4. I feel discouraged from continuing in college due to financial constraints. (\*)

5. My concerns about college costs limited what colleges I could attend. (\*)

\*indicates reserve coded items.

#### **College Knowledge Academic Capital Subscale**

1. I have role models in my family who attended college

### **Community Social Capital Structural Variables**

**How many students were in your high school graduating class? \_\_\_\_\_**

**What is the population of the county where your high school was located? Please provide your best estimate: \_\_\_\_\_**

**How far from your home is Kansas State University?**

- 0 = Less than 30 miles
- 1 = 31 miles-90 miles
- 2 = 91 miles-150 miles
- 3 = 151 miles-210 miles
- 4 = 211 miles-300 miles
- 5 = More than 300 miles

**Were you involved in a religious group in high school?**

- 1 = No
- 2 = Yes

**How many community organizations were you involved with in high school? \_\_\_\_\_**

**How many community organizations are you still involved with in your hometown? \_\_\_\_\_**

**My guidance counselor at my high school encouraged me to go to college.**

- 1 = No
- 2 = Yes

**My favorite teacher at my high school encouraged me to go to college.**

- 1 = No
- 2 = Yes

**My peers encouraged me to go to college.**

- 1 = No
- 2 = Yes

**Below is a list of people who may have encouraged you to apply to college. Please check all that apply.**

- Teacher
- Guidance Counselor
- Parents
- Siblings
- Grandparents
- Family Friend
- Peers

**Community Social Capital Processes Variable**

Please indicate your level of agreement with each of the following items on a 1-5 scale (1 = strongly disagree, 5 = strongly agree).

1. To get a good job in my community you need a college degree.
2. People in my community actively support higher education.

<b>Qualitative Questions</b>
------------------------------

**Having gone through your first semester of college, who do you believe has been the most helpful, and why? (Open ended response).**

**Were you discouraged by anyone or encouraged to do something else besides college? If so, why do you think the person discouraged you or urged you to do something else? (Open ended response).**

<b>Demographics</b>
---------------------

**Please enter your age in years: \_\_\_\_\_**

**Are you enrolled in K-State First? (First-Year Seminar)**

Yes

No

**Are you a member of a Cat Community? (Learning Community)**

Yes

No

**Please select one:**

Male

female

transgender male

transgender female

other (please identify) \_\_\_\_\_

**What is your racial/ethnic identity? Please select all that apply.**

Caucasian

African American/Black

Asian

Hispanic/Latino(a)

Native American/Indian

Pacific Islander

Other (please identify) \_\_\_\_\_

## Appendix C - Table 1

**Table 1.** Scale Reliability Statistics and Descriptive Statistics for Variables

<b>Variable</b>	<b><i>n of items</i></b>	<b><i>M</i></b>	<b><i>SD</i></b>	<b><i>α</i></b>
Persistence	14	4.10	.55	.80
<b><i>School Social Capital</i></b>				
School Capital Authority	13	3.74	.55	.78
School Capital Peers/PVDD	7	3.85	.76	.82
PGI Sub-Scale				
# of Clubs @ College	1	1.56	1.27	--
<b><i>Family Social Capital</i></b>				
Family Capital Processes	8	3.55	.81	.75
Mother's Education (Structural)	1	5.30	1.83	--
Father's Education (Structural)	1	5.49	1.67	--
Family Income (Structural)	1	4.55	1.55	--
<b><i>Community Social Capital</i></b>				
Community Capital Processes	2	4.02	.90	--
HS Community Organization	1	3.04	2.73	--
Involvement				
Current Community	1	.79	1.26	--
Organization Involvement (Hometown)				

## Appendix D - Table 2

**Table 1.** Regression Analysis for Intent to Persist

Predictor	B	$\beta$	SE	t	Model R <sup>2</sup>
School Capital Authority	.49	.49	.09	5.62***	.45
School Capital Peers	.17	.24	.06	2.86**	.45
School Capital Clubs	.05	.10	.04	1.29	
Family Capital	.04	.05	.06	.61	.45
Processes					
Community Capital	-.03	-.05	.05	-.58	.45
Processes					

Notes: N = 101.

\*\*\*  $p < .001$  \*\*  $p < .01$ , \*  $p < .05$



## Appendix E - Table 3

**Table 2.** T-Test and Descriptives for School Social Capital by Student High School County

	Student High School County						95% CI for Mean Difference	t	df
	<u>Metro</u>			<u>Nonmetro</u>					
	M	SD	n	M	SD	n			
School Capital (Authority)	3.65	0.52	56	3.86	.57	45	-.42, .01	-1.89 <sup>+</sup>	90.28
School Capital (PGI) (Peer)	3.80	.80	56	3.90	.70	45	-.40, .20	.68	98.34
School Capital (Clubs @ KSU) (Peer)	1.63	1.15	56	1.49	1.41	45	-.38, .65	.523	84.55

*Note:* Satterthwaite approximation employed due to unequal group variances. +  $p < .10$ , \*  $p < .05$

## Appendix F - Table 4

**Table 3.** T-Test and Descriptives for Family Social Capital by Student High School County

	Student High School County						95% CI for Mean Difference	t	df
	<u>Metro</u>			<u>Nonmetro</u>					
	M	SD	N	M	SD	n			
Family Capital (Processes)	3.49	0.78	56	3.62	.85	45	-.45, .19	-.80	91.04
Mother’s Education (Structural)	5.17	1.90	52	5.46	1.75	39	-1.05, .47	-.75	85.29
Father’s Education (Structural)	5.40	1.77	50	5.61	1.57	36	-.93, .51	-.58	80.32
Family Income (Structural)	4.80	1.49	56	4.24	1.58	45	-.06, 1.17	1.81 <sup>+</sup>	91.88
Siblings Attend College (Structural)	1.43	.50	53	1.64	.49	44	-.40, -.003	-2.01 <sup>*</sup>	92.61
Siblings Complete College (Structural)	1.57	.51	23	1.50	.51	28	-.22, .35	.46	47.18

*Note:* Satterthwaite approximation employed due to unequal group variances. +  $p < .10$ , \*  $p < .05$

## Appendix G - Table 5

**Table 4.** T-Test and Descriptive for Community Social Capital by Student High School County

	Student High School County						95% CI		t	df
	<u>Metro</u>			<u>Nonmetro</u>			for Mean			
	M	SD	n	M	SD	n	Difference			
Community Capital (Processes)	4.26	.84	56	3.72	.89	45	0.19, 0.88	3.09*		92.04
Far from home is KSU	3.39	1.07	56	3.47	1.25	45	-0.54, 0.40	-0.31		86.94
Community Religious Group Involvement	2.14	.88	56	2.11	.83	45	-0.31, 0.37	0.19		96.47
# Community Organizations in HS	2.77	2.58	56	3.38	2.90	45	-1.71, 0.49	-1.10		88.93
# of Community Organizations Current	.93	1.36	56	.62	1.11	45	-0.18, 0.80	1.25		98.96
Guidance Counselor Encouragement	2.71	.62	56	2.71	.59	45	0.003, 0.12	0.3		96.45
Favorite Teacher Encouragement	2.80	.52	56	2.80	.51	45	0.004, 0.10	0.04		95.47
High School Peer Encouragement	2.75	.58	56	2.80	.51	45	-0.50, 0.11	-0.46		98.35

*Note:* Community Capital (Processes) consists of two items: “To get a good job in my community you need a college degree” and “People in my community actively support higher education.”

*Note:* Satterthwaite approximation employed due to unequal group variances. +  $p < .10$ , \*  $p < .05$